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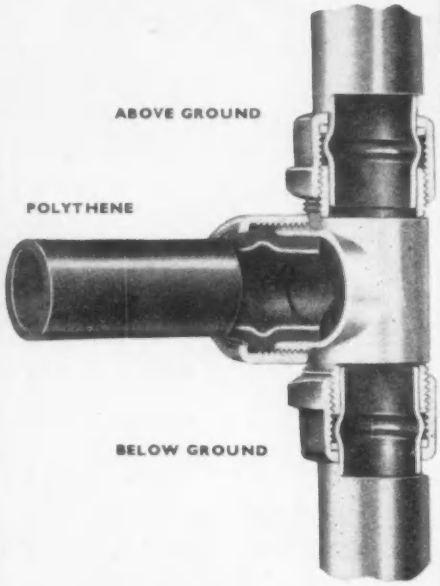

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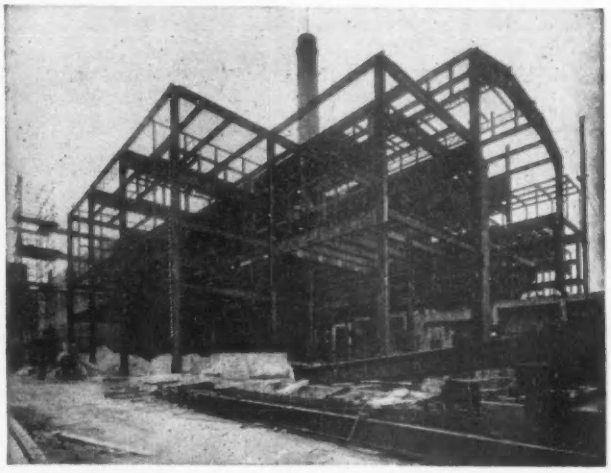

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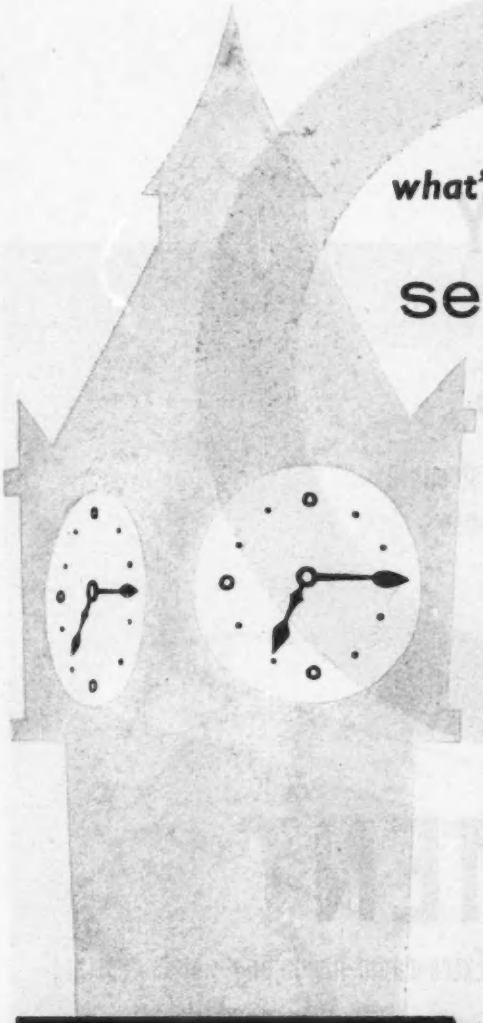

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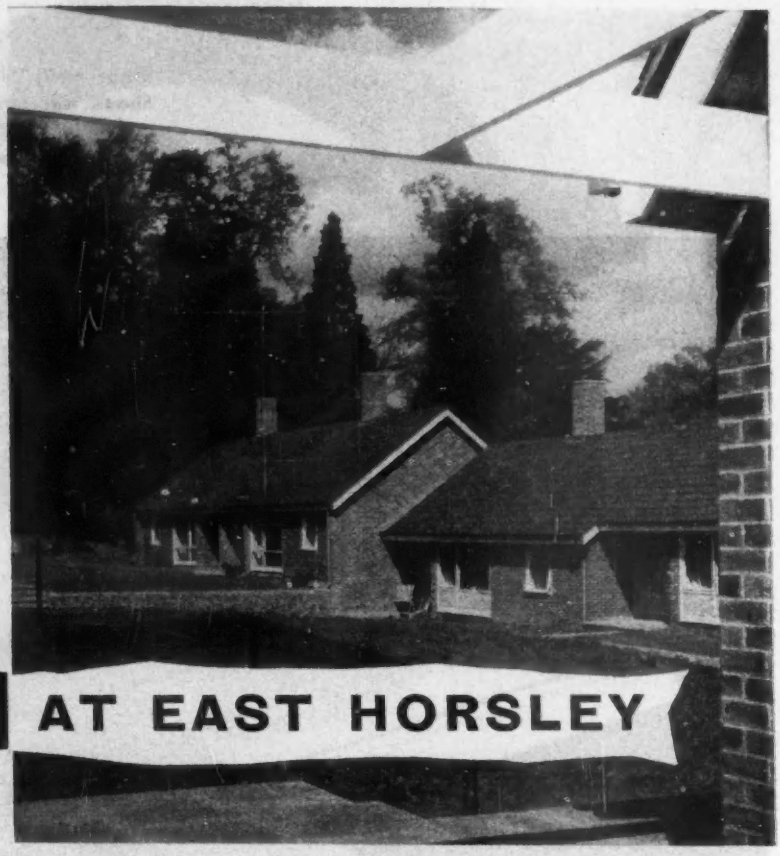

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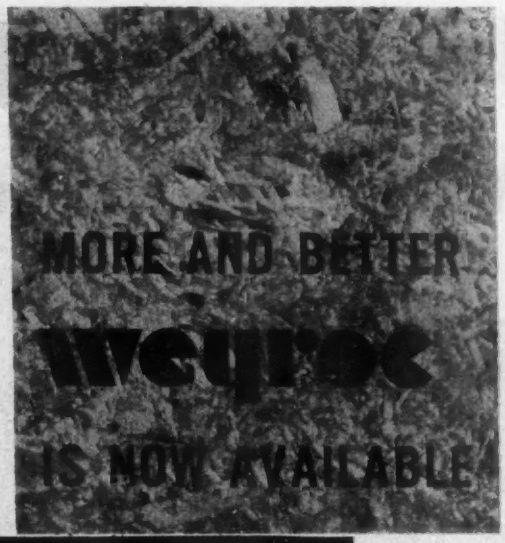

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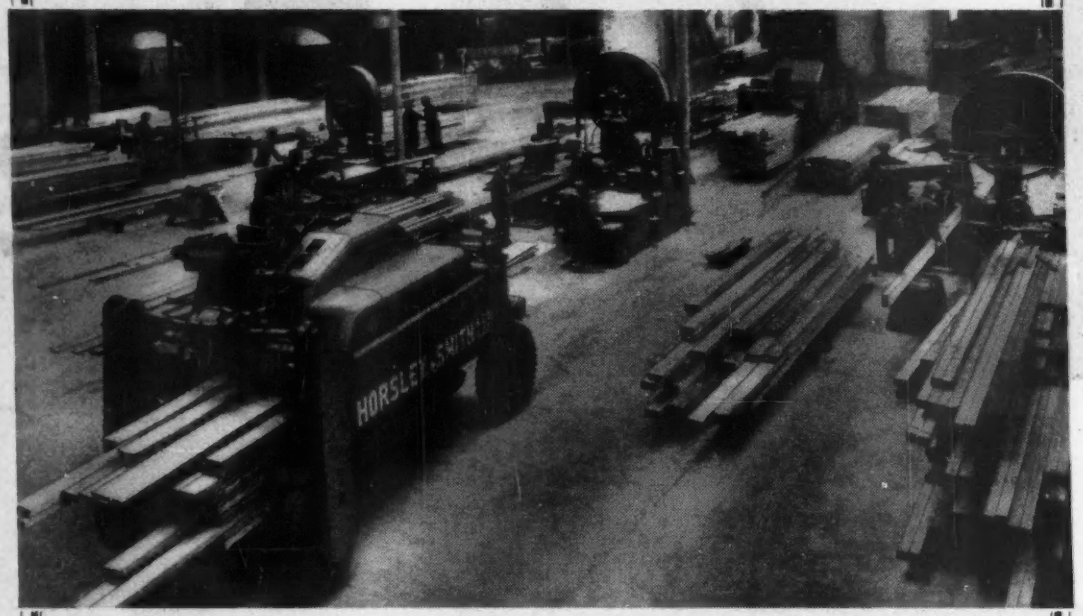

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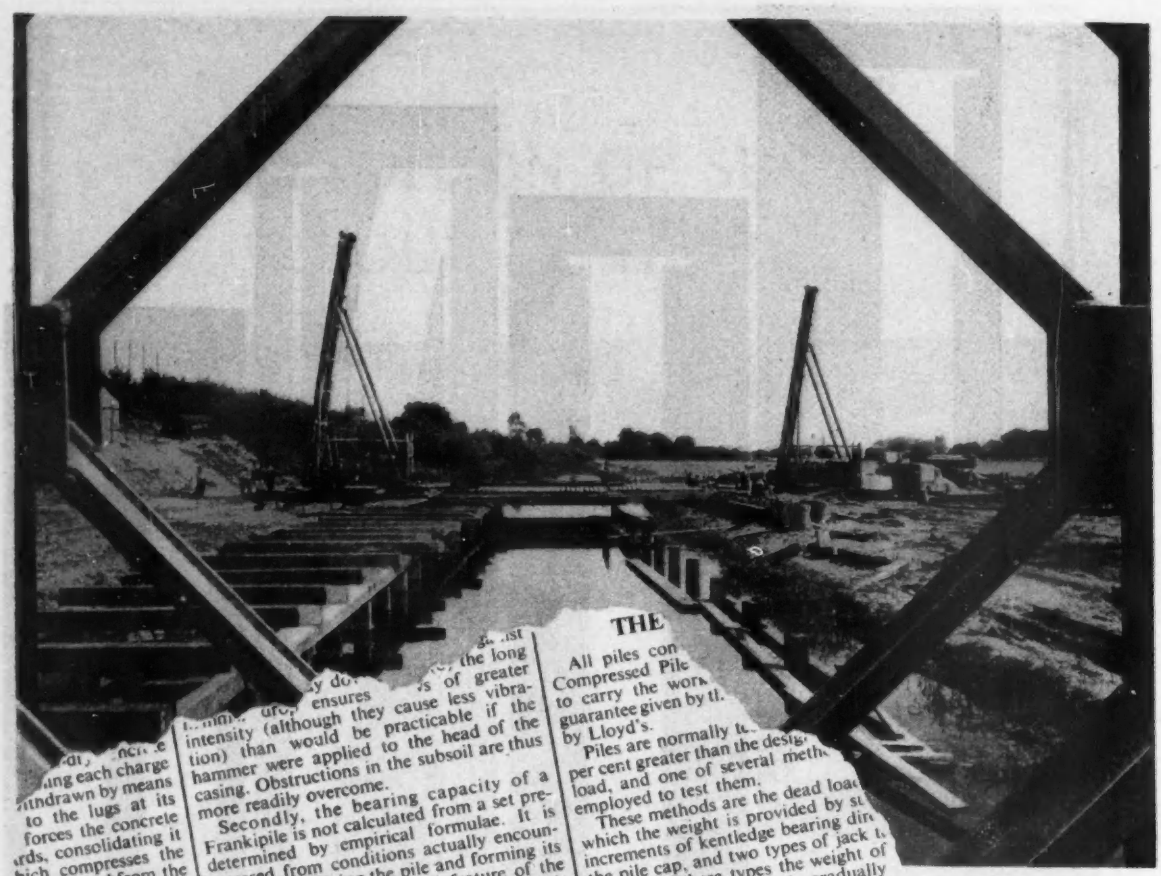

...ing each charge ...ithdrawn by means ... to the lugs at its ...rds, consolidating it ...hich compresses the ...s it is forced from the

...reater in diameter than ...be, providing adequate ... reinforcement and at ...ing the maximum skin ... rough corrugated sur- ...l which has already been ... driving process and is ...gain by the greater girth

...nation of the pile shaft a ...mer cable serves (in the ...n the tube was driven) to ...d of concrete necessary to ...ry of water or any other ... Should water accidentally ...e heavy hammer jams in the ...d the pile has to be re-driven. ... practical assurance that a ... water-cement ratio is always ...e. In fact this ratio is lower ...her system of in-situ piling.

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... of the shaft can be stopped at ...e below ground level, always ... shaft has attained the adequate ...ength for stability. Except in ...umstances no in-situ piles can ... above the ground level from ... are installed.

...ormal practice to finish off the ... about a foot above the required ...vel and to allow a rather greater ...reinforcement. In this way, when ...the pile cap, the top ...crete

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These methods are the dead load... which the weight is provided by st... increments of kentledge bearing dir... the pile cap, and two types of jack t... the first of these types the weight of... test load of kentledge is gradually... ferred on to the pile by means of the ... in the second, the jack operates not ag... kentledge but against the uplift obta... from adjacent piles.

These methods can be relied up... equally accurate results, the cho... them generally depending on sit... and the type of kentledge avail...

Whichever method is used, ... taken at agreed stages during t... incremental loading until the p... ing the full test load. The full l... allowed to remain on the pile f... mined period, which is normally ...

After the recording of any ... which may have occurred during th... the load is gradually reduced aga... ings being taken at each stage in th... way as when the load on the pile was ... increased.

When the pile is completely free of ... final reading is taken. The difference b... this and the reading under the full ... is recorded as the permanent s...

Piles are normally tested sin... also be tested in groups.

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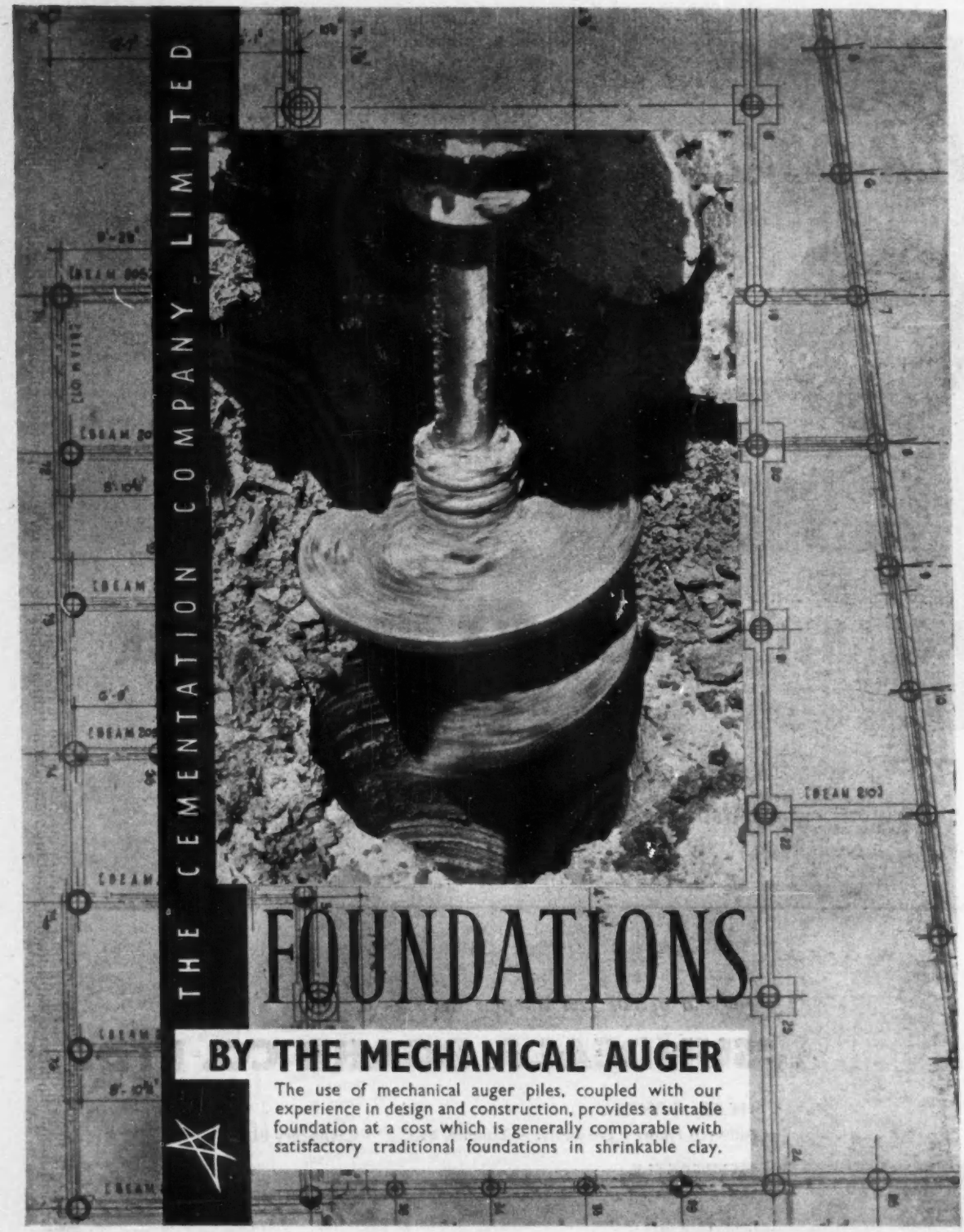

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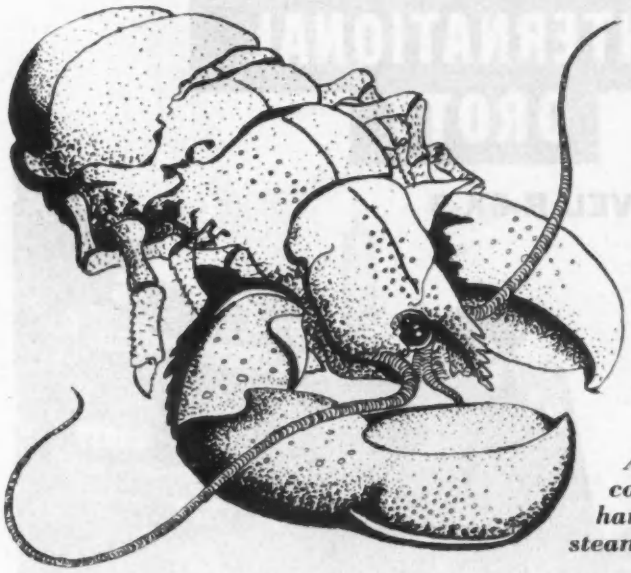

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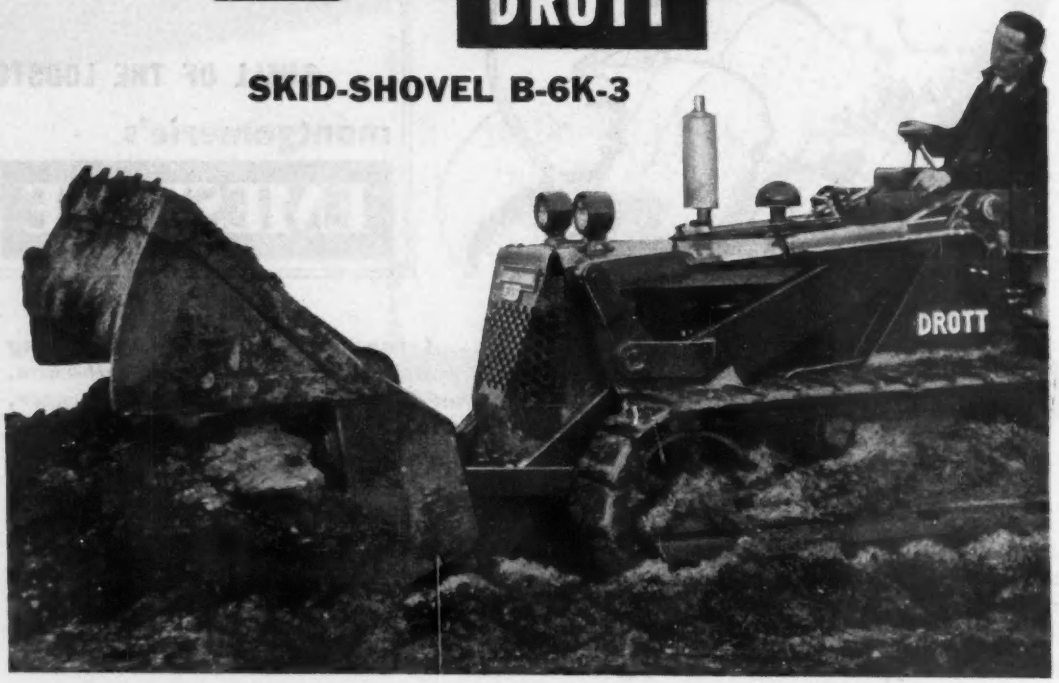

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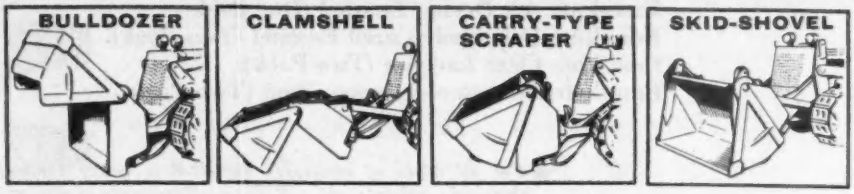

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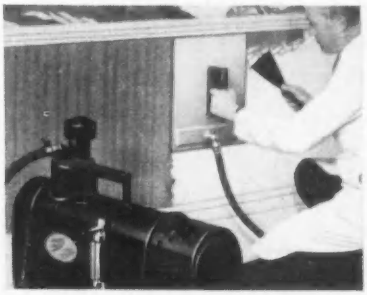

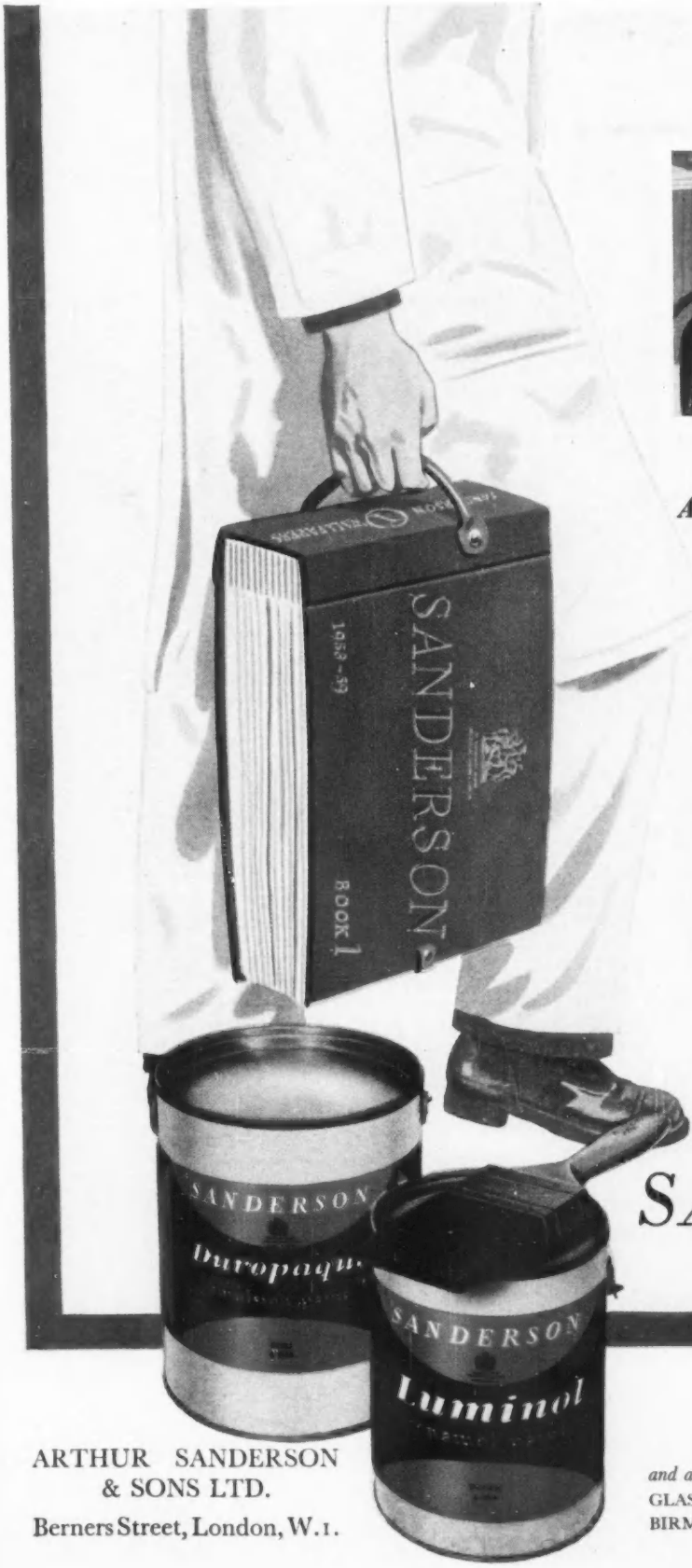

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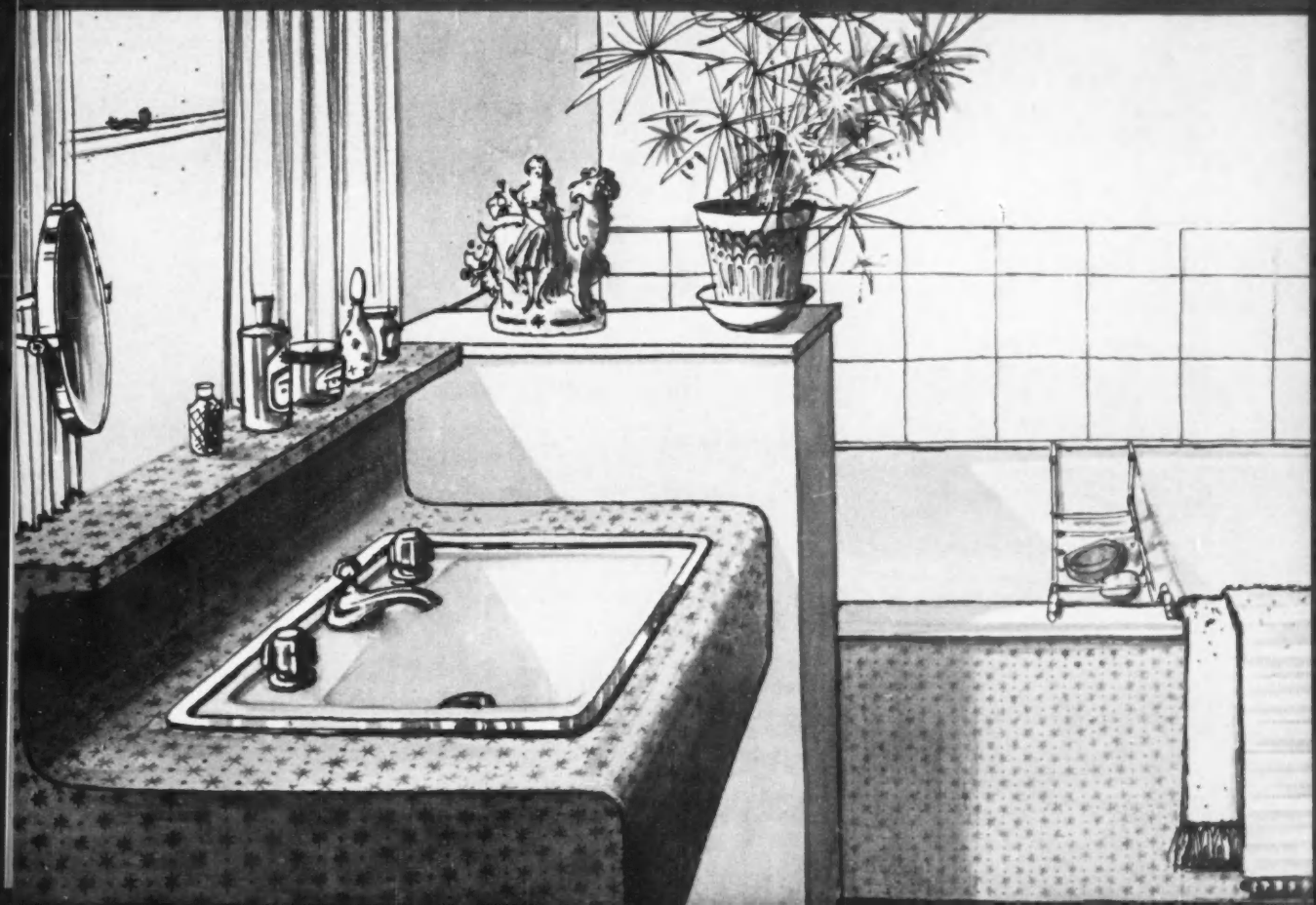

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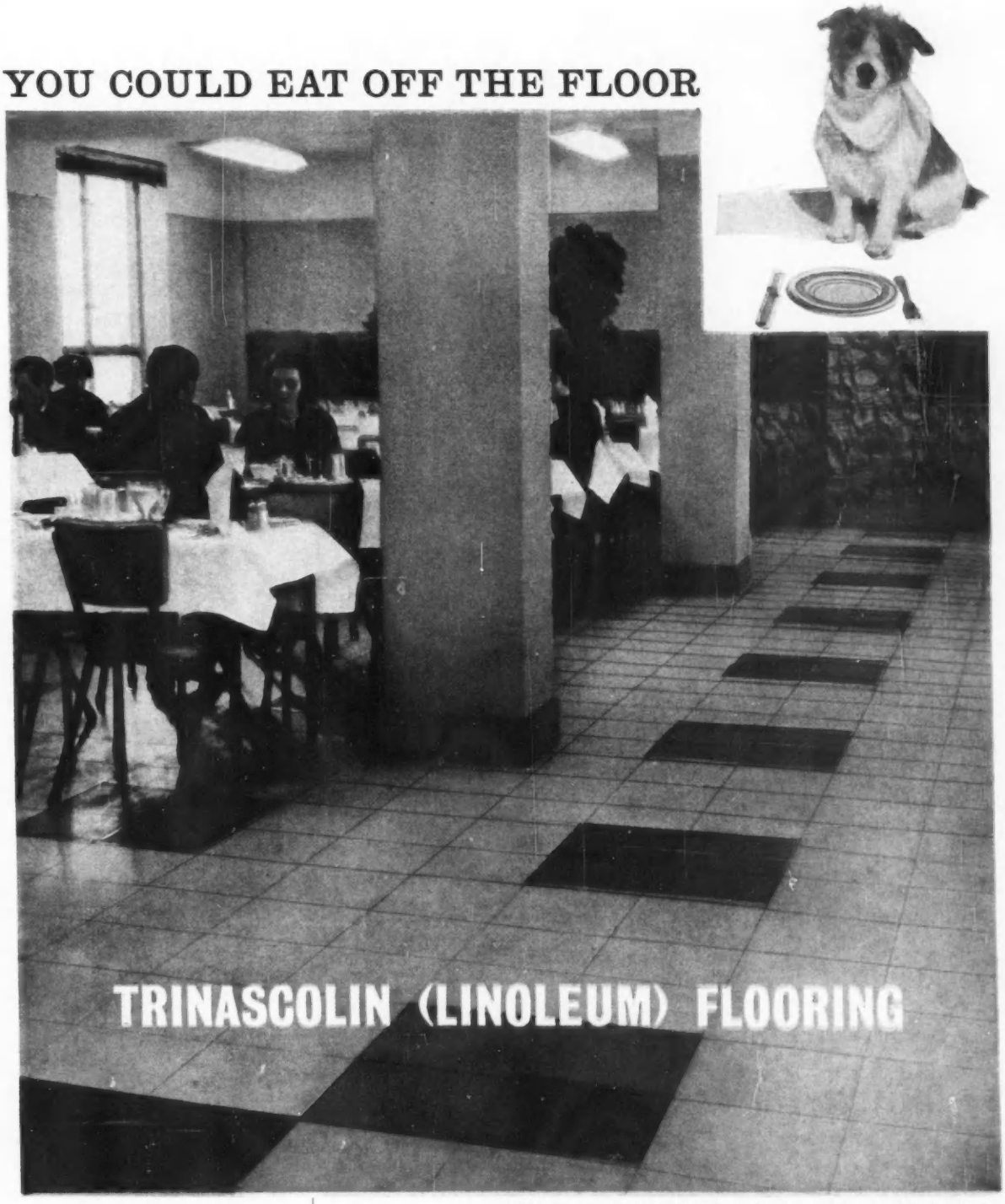

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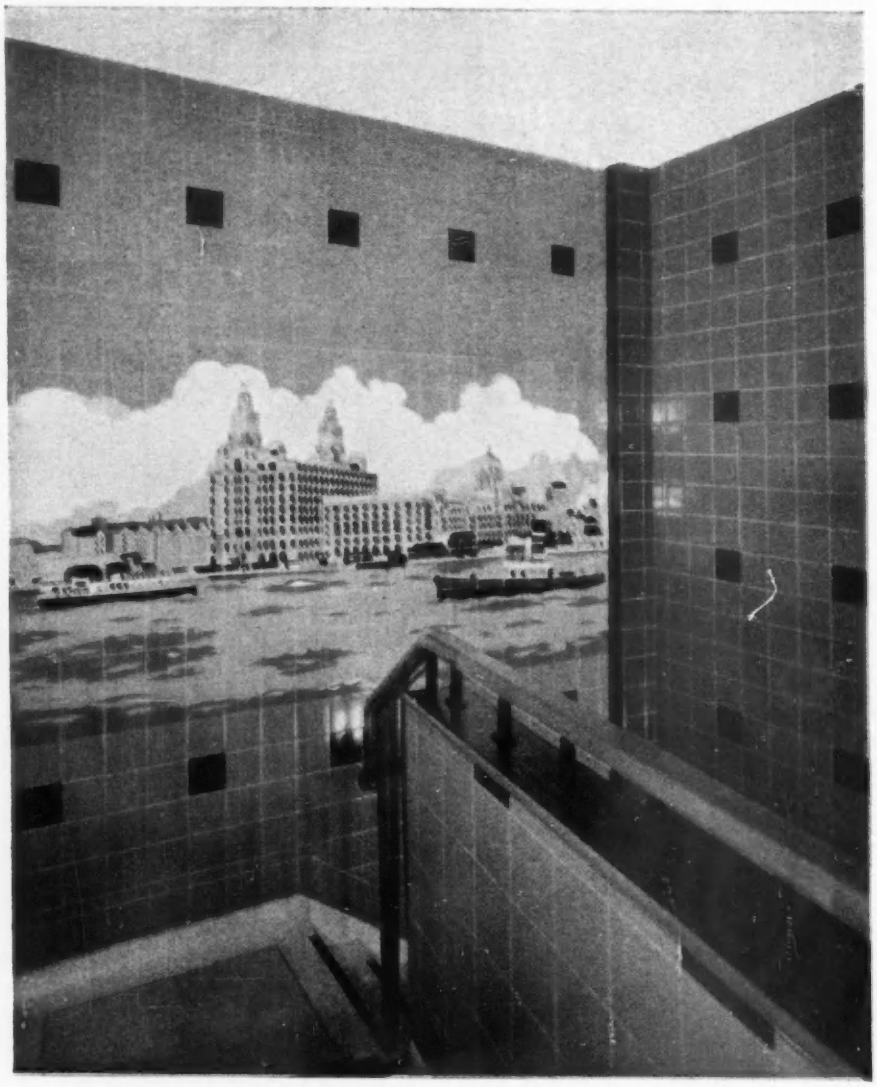

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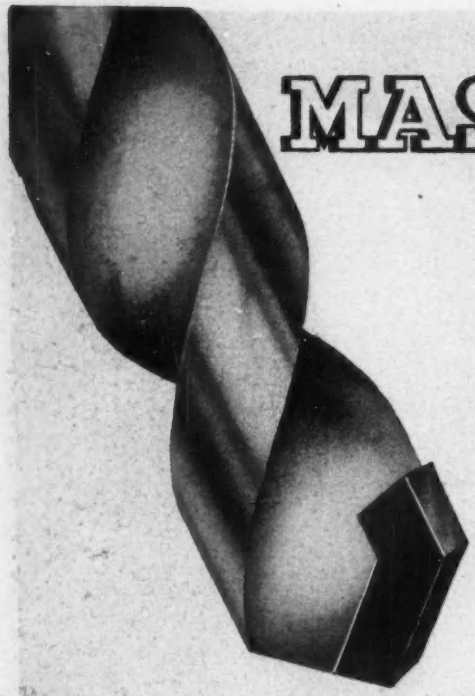

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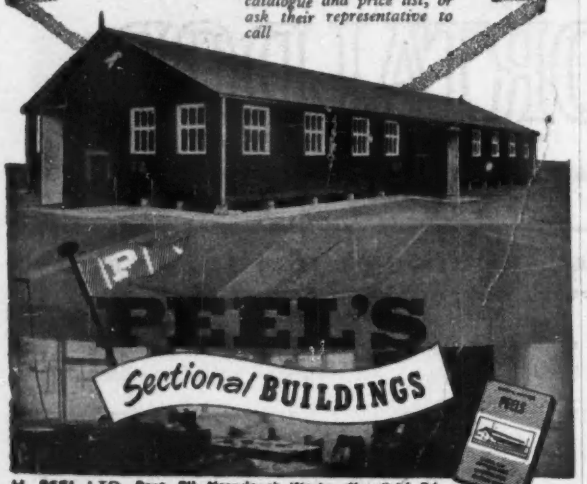

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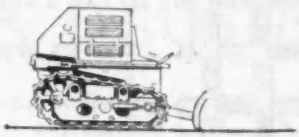

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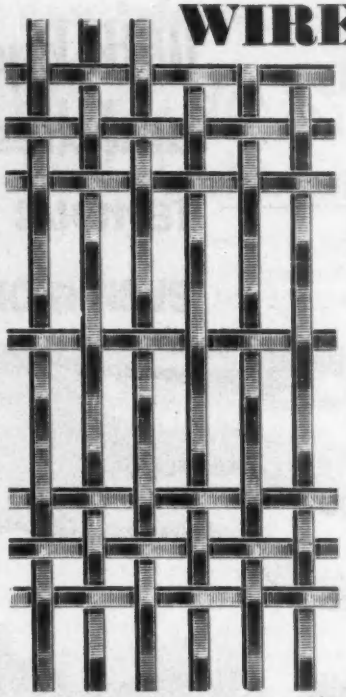

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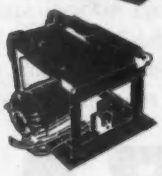

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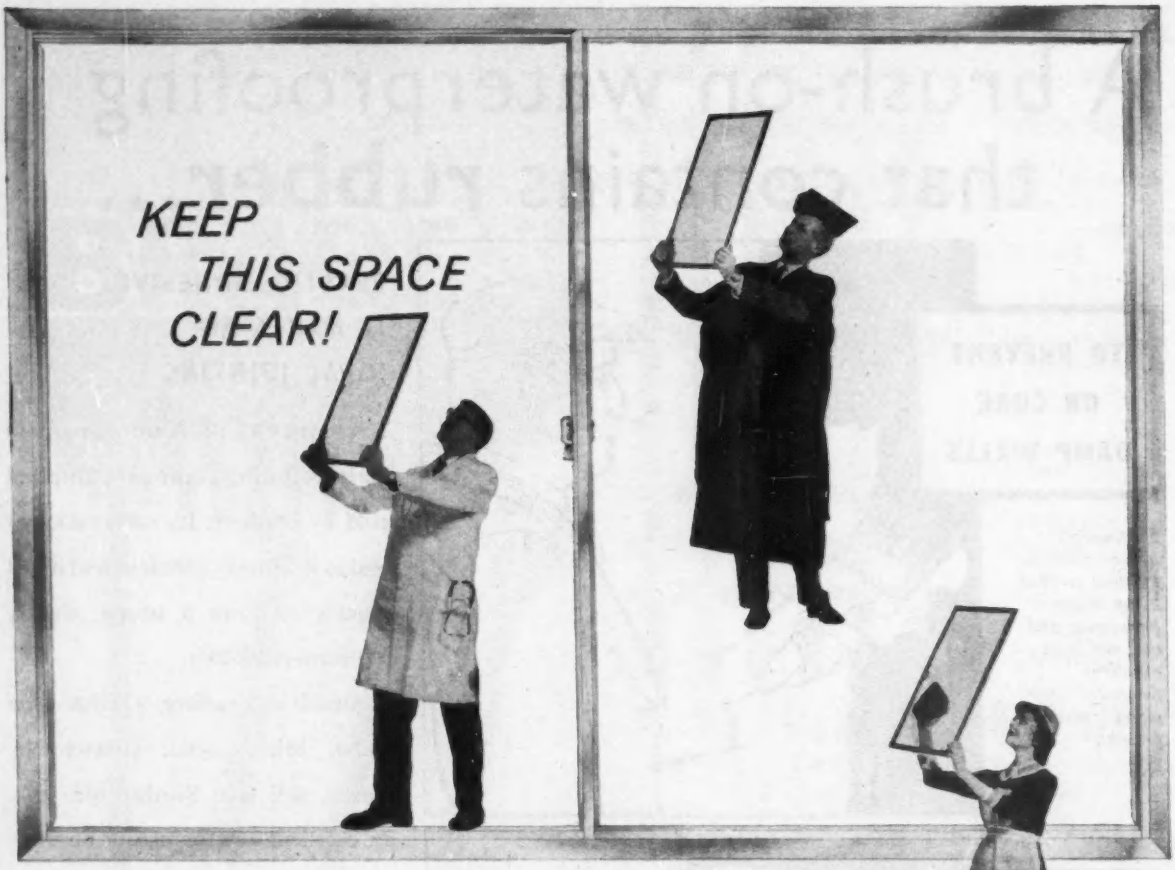

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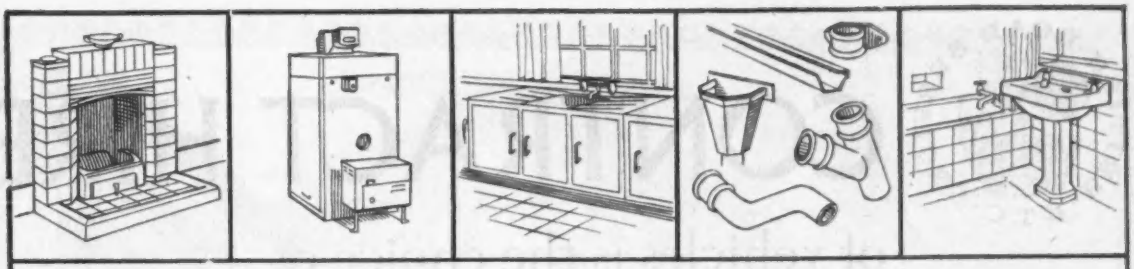

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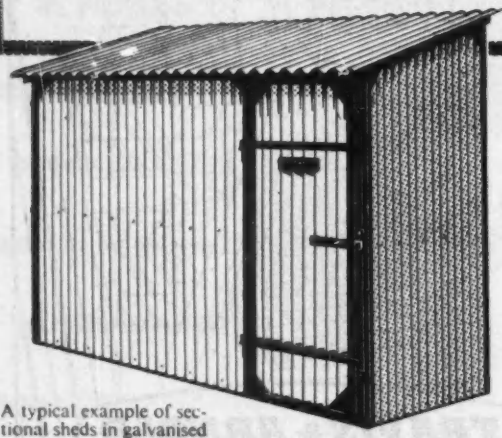

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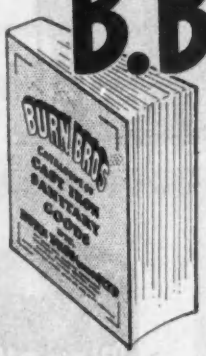

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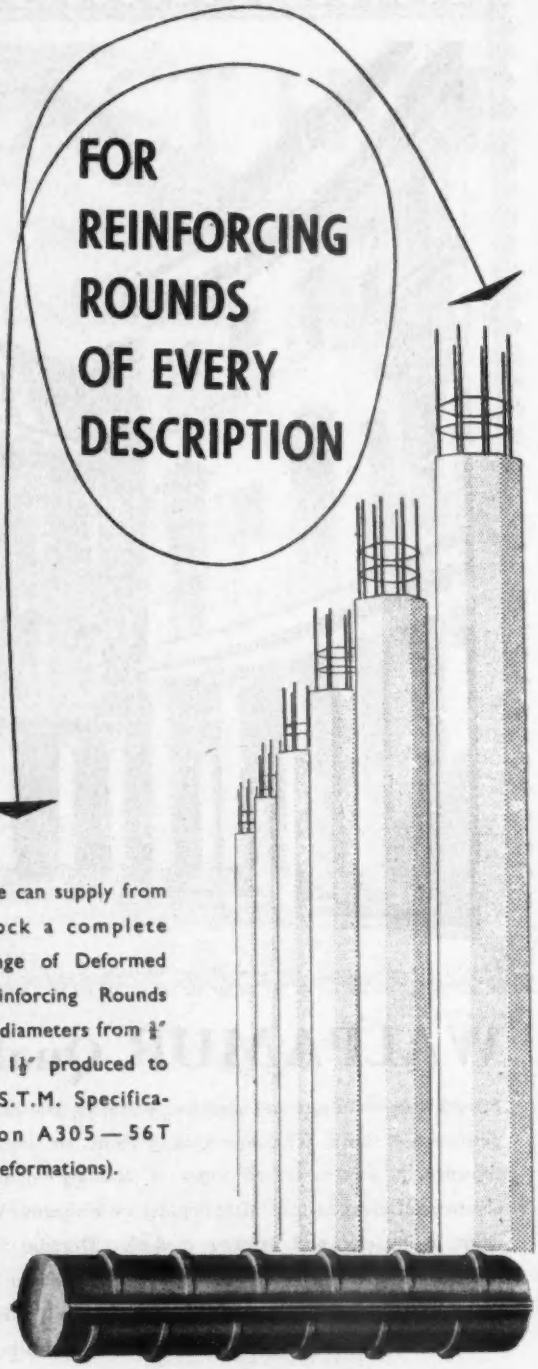

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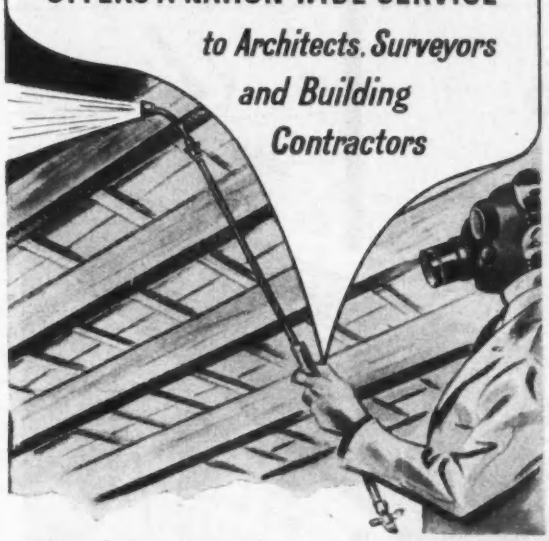

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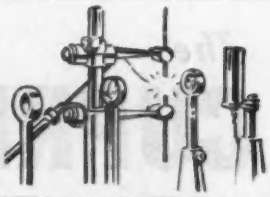

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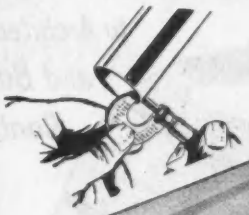

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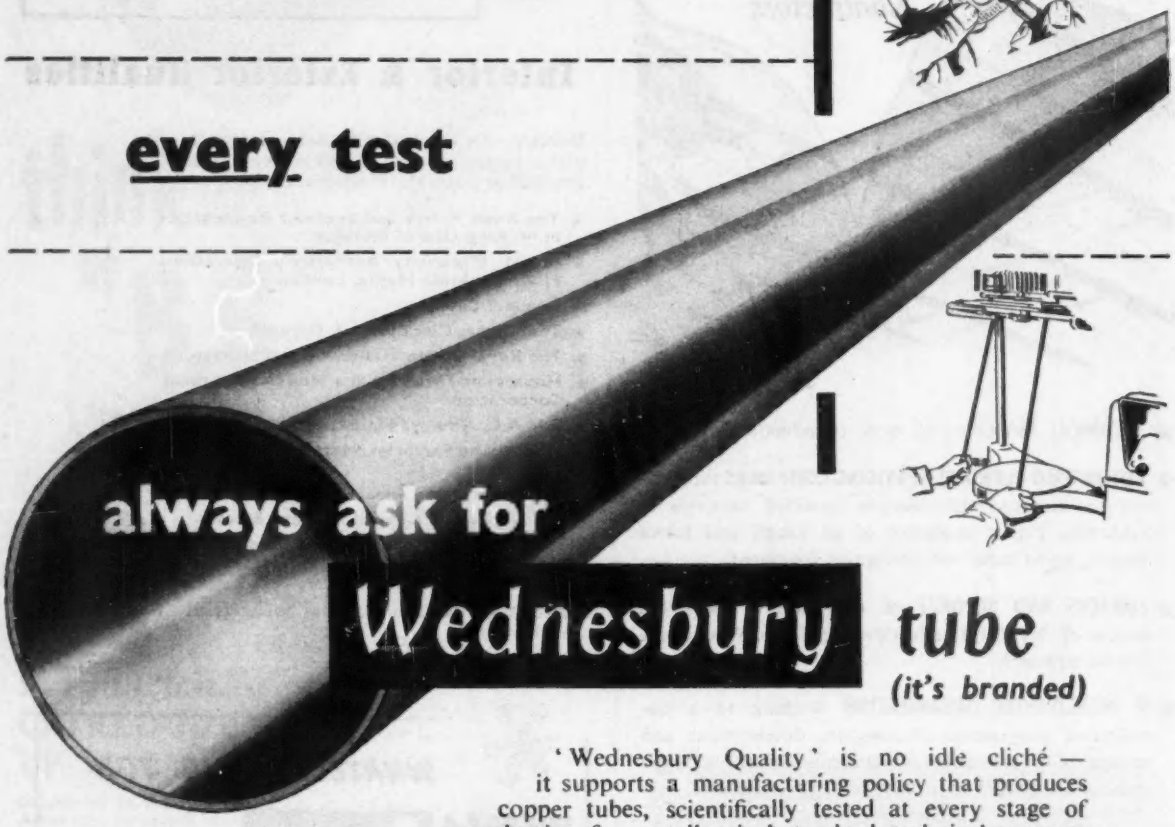

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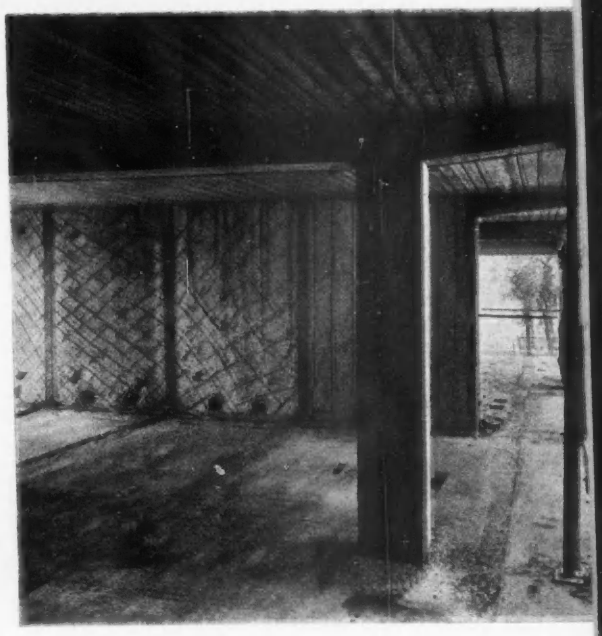
Where heavy point loads occur, such as beam ends seating on the cross walls, the cavities are filled solid.

Architect: R. A. H. Livett, O.B.E., A.R.I.B.A., Leeds City Architect's Dept.
Main Contractors: Myton Ltd.



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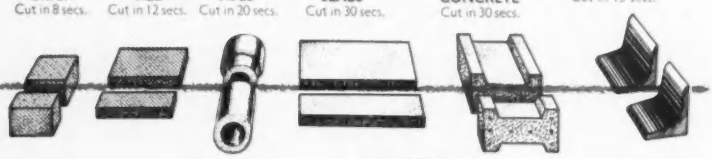

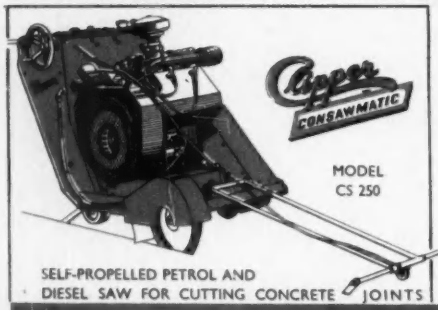

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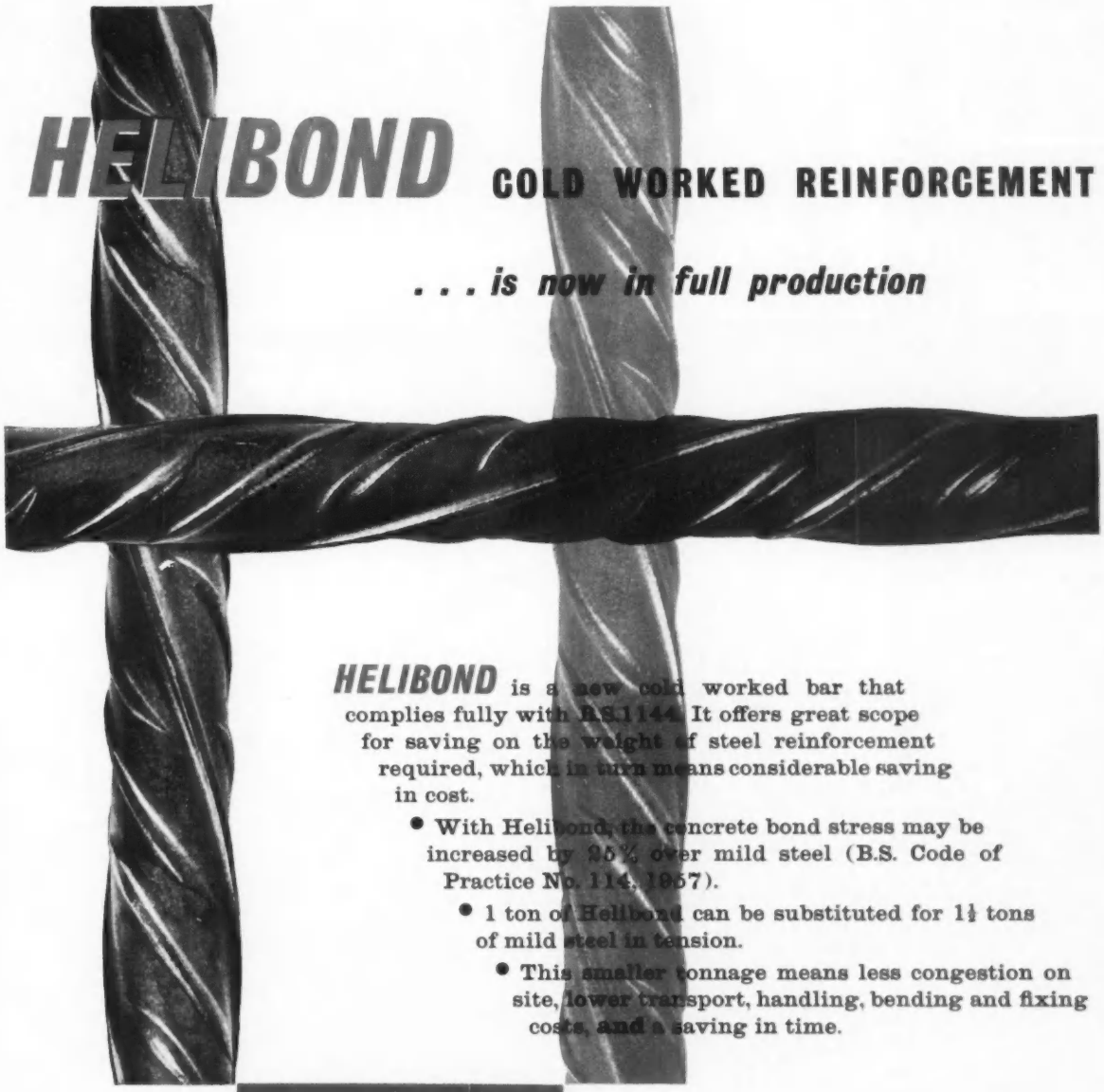

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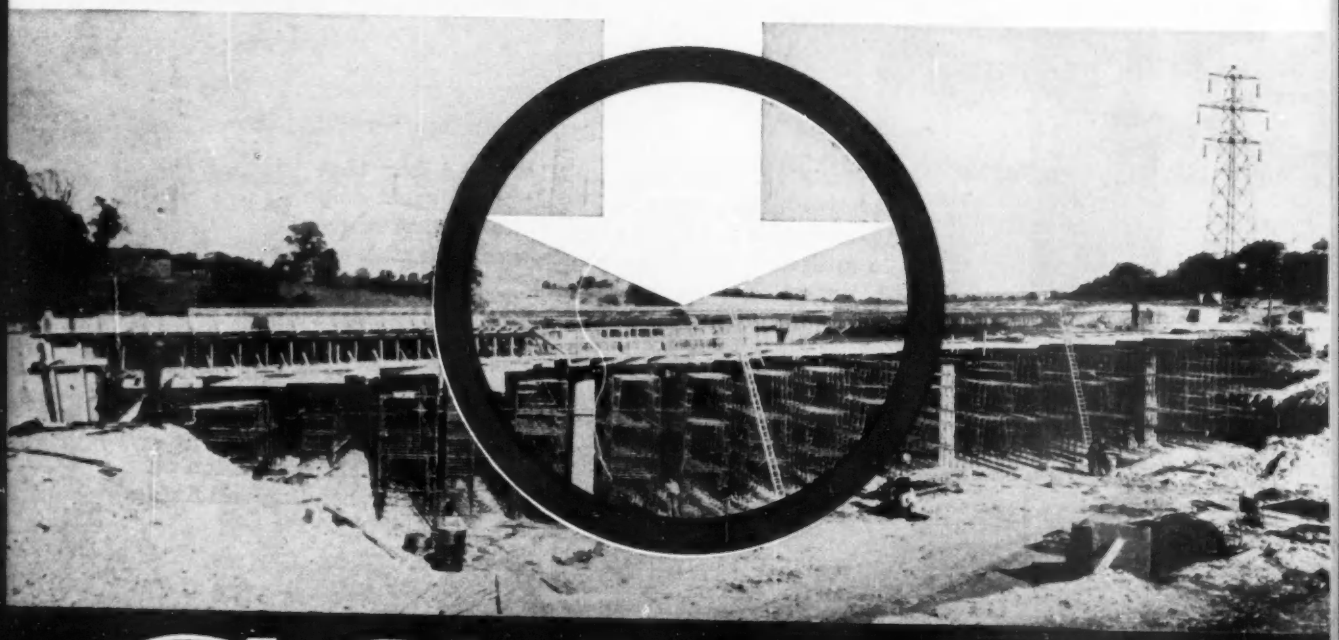

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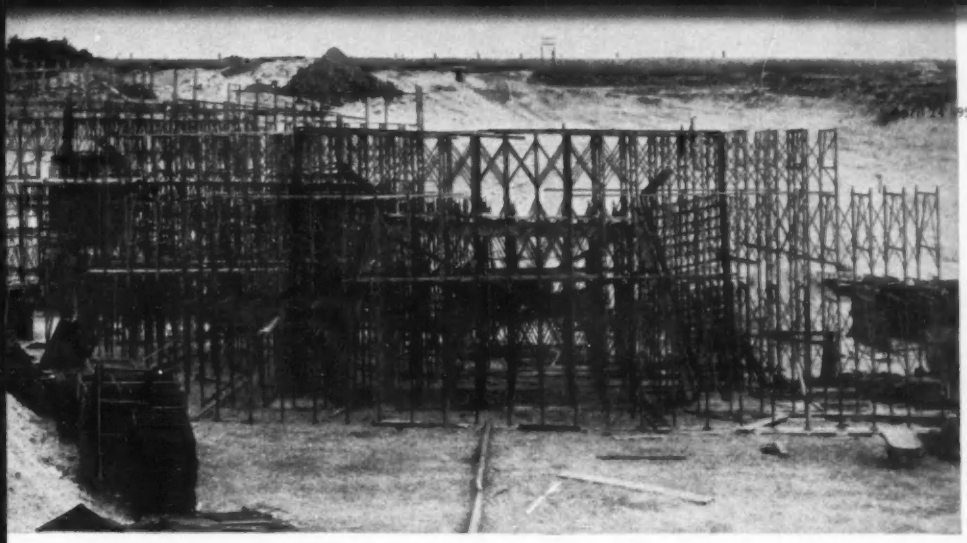

The photographs show Sterling Safway Scaffolding in use at No. 6 Bridge on St. Albans Bye Pass built by Messrs. TARMAC Ltd.

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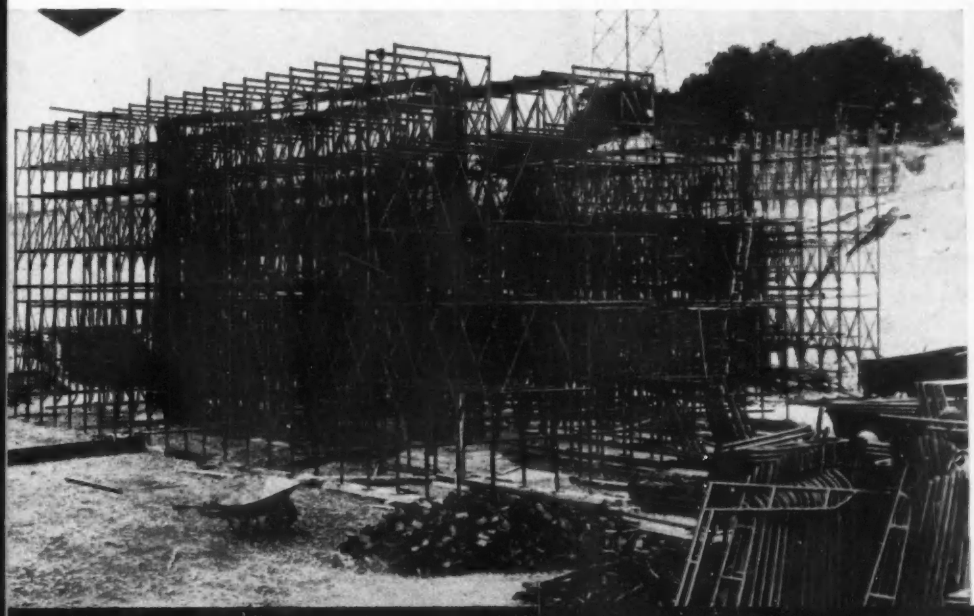

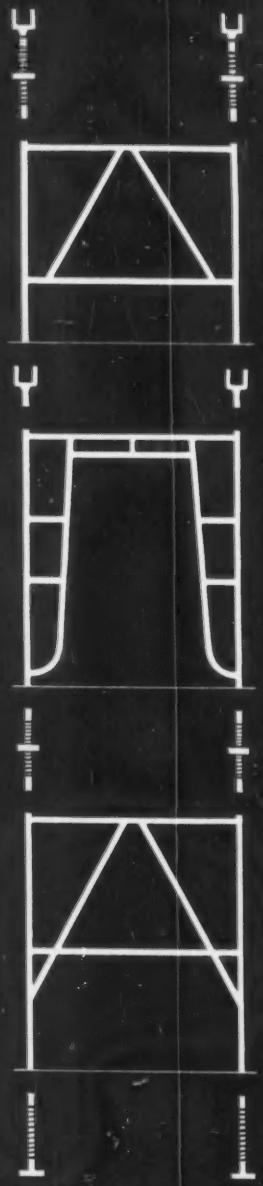

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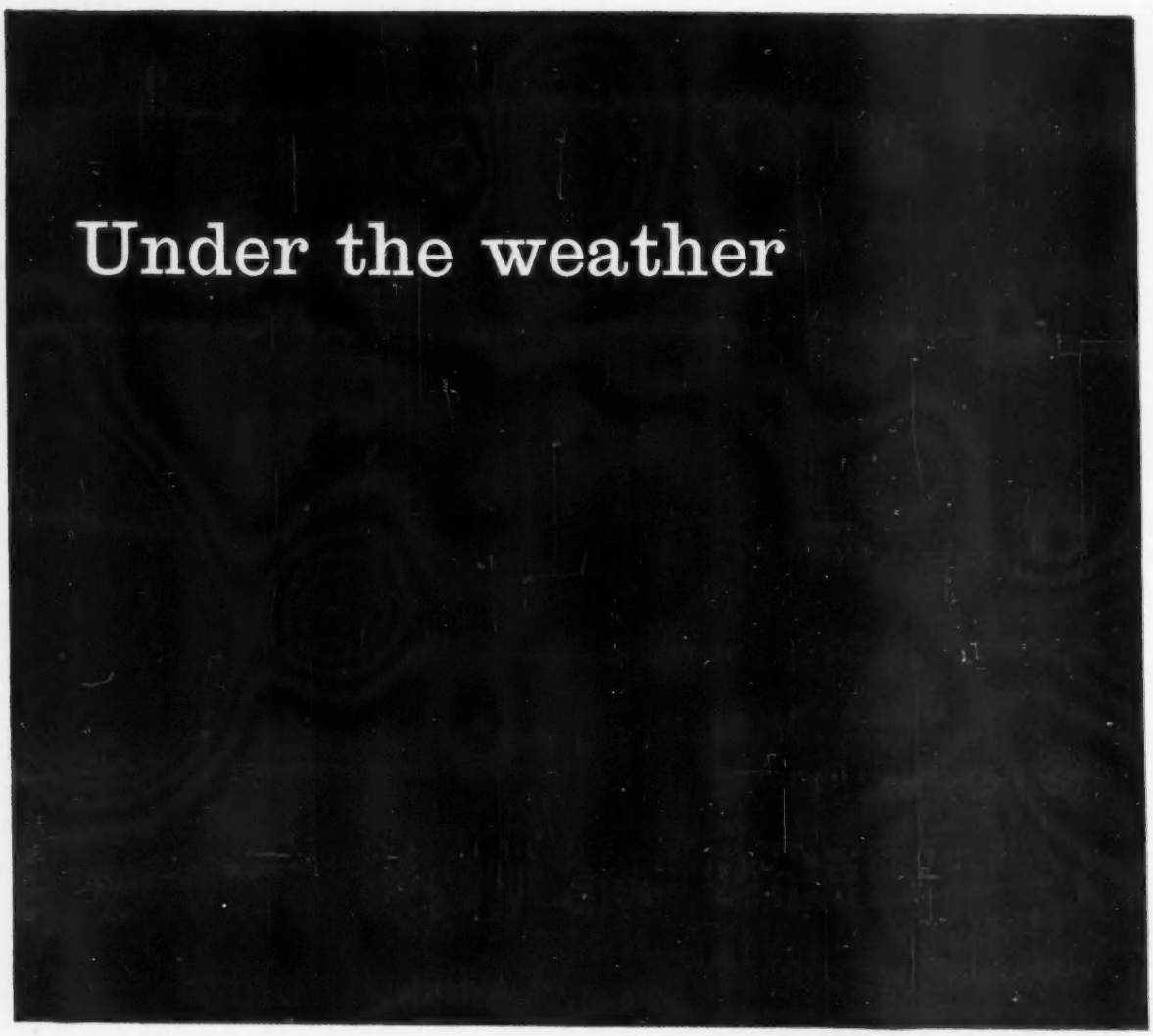
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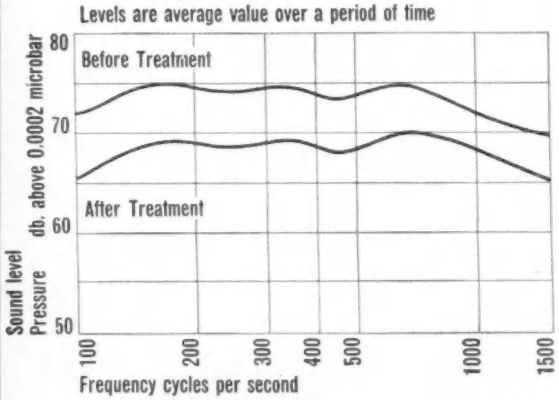

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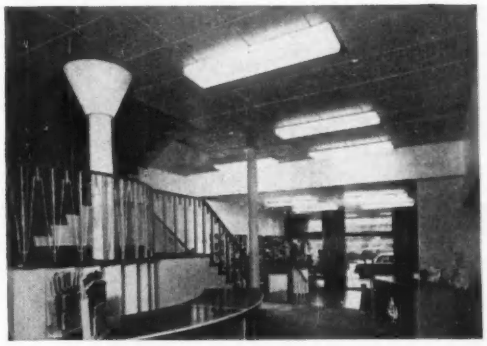

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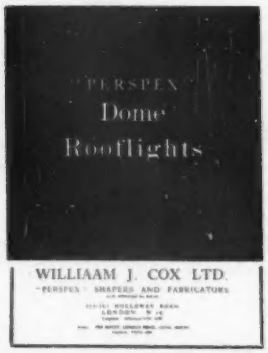

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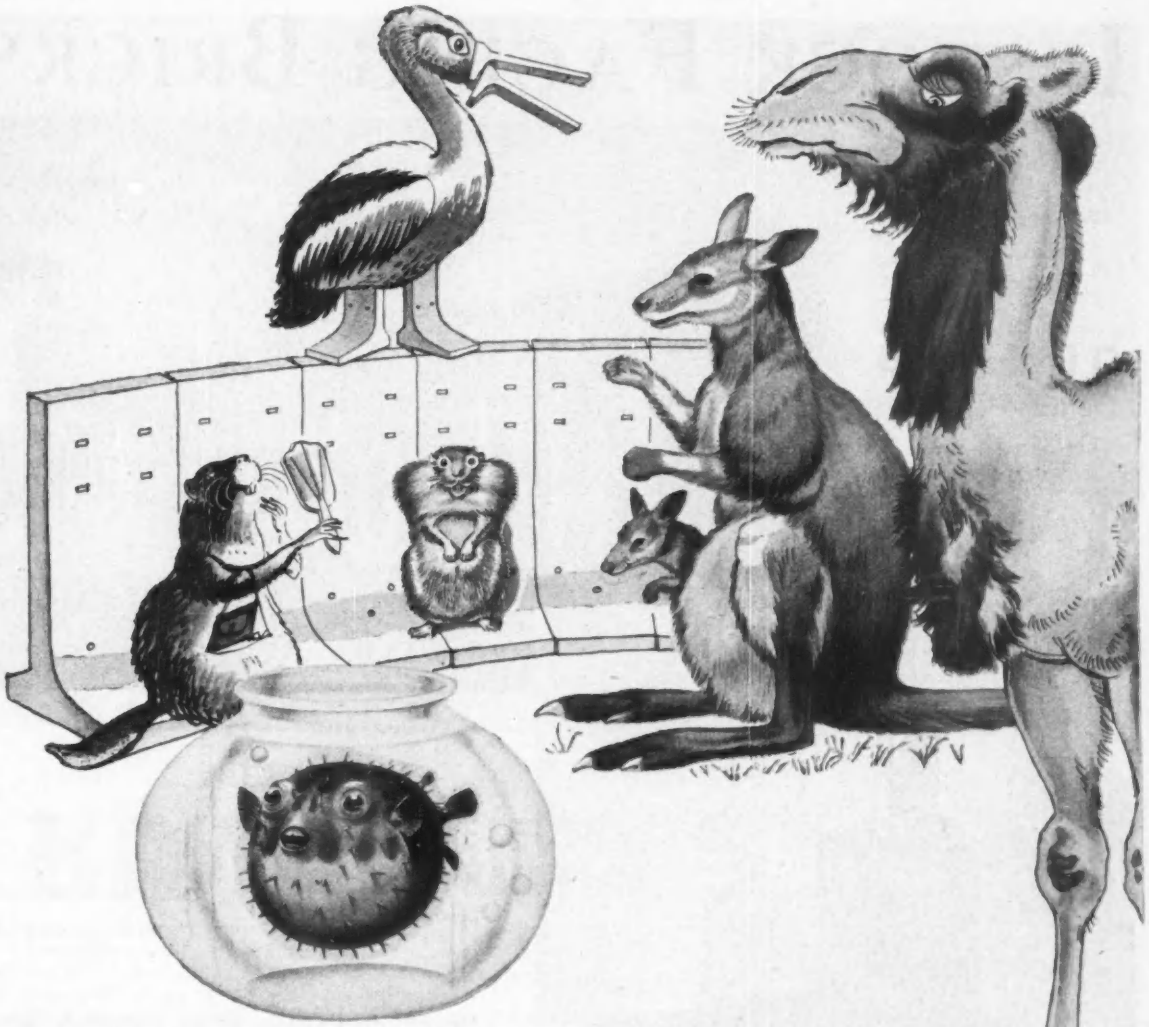

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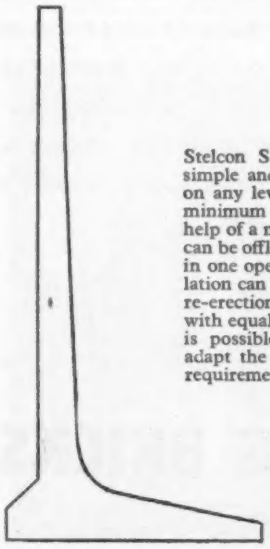

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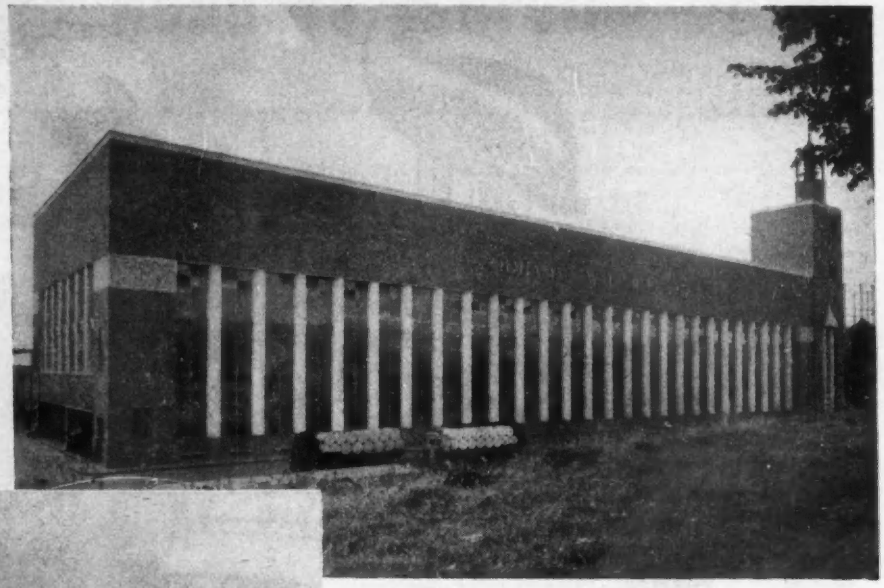

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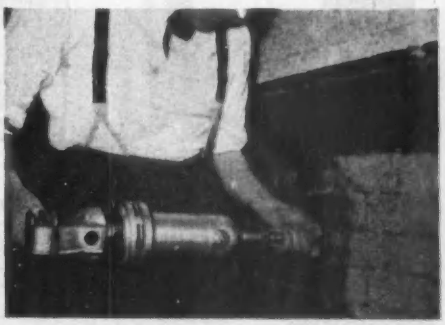

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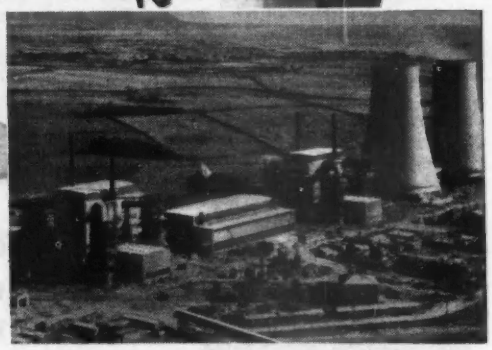

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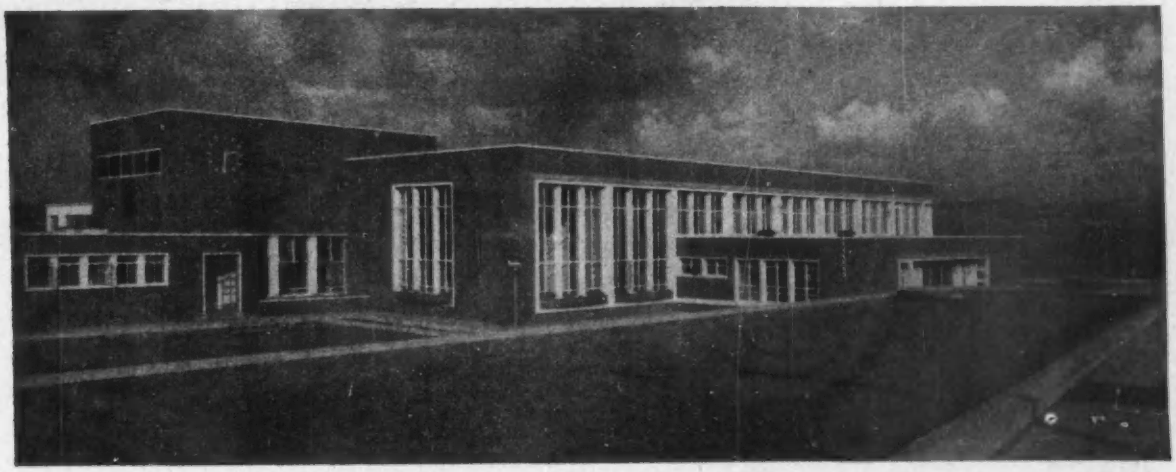

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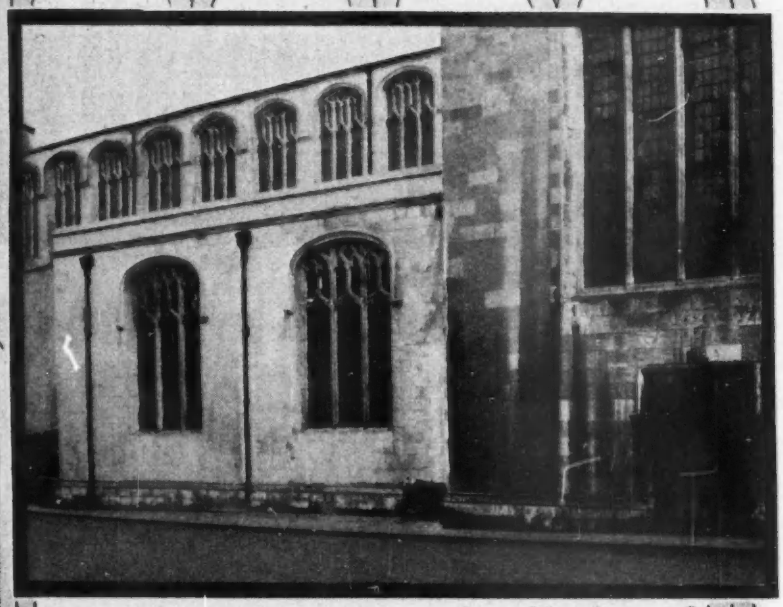

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NEWS SUMMARY

THE RFAC's statement on urban motorways is seen by the RIBA as vindication of the contention that 'architectural advice from the very beginning is essential in the planning and design of motorways.' p. 765

AN EXHIBITION of British goods is to be held in New York in June next year. p. 779

ADVANTAGES to the architect of the Comprehensive Building Service compared with the All-in Service were described to architectural students. p. 782

INVESTIGATIONS into possible routes for the Channel Tunnel are being resumed. p. 789

A SERIES of Government amendments to the clauses of the Factories Bill dealing with fire risk and fire prevention were agreed. p. 790

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THE BUILDER

Incorporating ARCHITECTURE & THE BRITISH ARCHITECT

Vol. CXCVI April 24th 1959 No. 6056

PRIVATE ARCHITECTURAL PRACTICE

THE proportion of building work designed and supervised by architects in this country has never been exactly known. Guesses at it have often been made and various figures suggested, ranging from 10 to 40 per cent. From surveys carried out by the RIBA in 1957 and 1958 at the request of the Ad Hoc Committee (summarised in a most interesting article entitled 'A Survey of Private Architectural Practice' in the April number of the *Journal* of the RIBA), it is clear that all estimates have erred on the side of caution.

It is shown that of the total volume of new building work done in 1955, 1956 and 1957, private practice was responsible for the design and supervision of at least one-third. The inquiry is being extended to find out the volume of work handled by the architects' departments of public authorities and industrial and commercial firms, and it is stated that when this work is taken into account it seems likely that the architectural profession will be found to be handling between 60 and 70 per cent of the country's new building work, a surprisingly high figure.

Private practice is shown to absorb at least half of the architectural profession. In 1958 there were about 3,000 private firms in Great Britain, estimated to employ some 9,000 architects and 5,500 architectural assistants (unqualified). Well over half of the practices are in the South of England—London and Middlesex alone containing almost a third of them. England, as a whole, had 88 per cent of the total, Scotland 9 per cent, and Wales 3 per cent.

As one would expect to find, the small practice still predominates, but some of the detailed figures are rather surprising. In 1957-58 three-quarters of all practices in Great Britain had five or fewer architectural staff. Forty per cent had one principal and no qualified assistants; more than half of these, or one firm in five, consisted of one architect working on his own, with no architectural assistance at all. The larger firms with eleven or more staff made up only 10 per cent of the total number of firms but accounted for one-third of the total staff and about 38 per cent, or nearly two-fifths of the total work done by private architects. The survey showed that there are few really large private firms of architects in this country, only about 40 firms employing 25 or more architectural staff and of these fewer than a dozen having a staff of more than 50. Most of the large practices are concentrated in the London area.

Work certified by private architects rose to a value of well over £400 million in 1957 out of a total of £1,200 million. The three major fields of work were commercial buildings (offices, shops, hotels, etc.), housing and industrial buildings, which together made up 83 per cent of the total work privately certified. A bigger proportion of commercial buildings was designed by private architects than any other kind of building—77 per cent, compared with the average of 33 per cent for all buildings. Only 34 per cent of industrial buildings and 7 per cent of farm buildings were designed and certified by private architects, which, as the article suggests, indicates a considerable scope in two rather specialised fields for extending the services of the architect. In housing, too, there is much room for improvement, only 29 per cent of the value of this being certified by private architects.

The article gives many other interesting facts and figures about private practice, not only here but in Canada and the United States. The most surprising thing that emerges from the study is, as we have suggested, the likelihood that the profession as a whole is now handling between 60 and 70 per cent of the country's new building work; and the question is, how much of that 40 or 30 per cent margin is open to capture. On the answer to this must depend future decisions as to the size of the profession. The further article that is promised on this aspect of the subject will be awaited with considerable interest.

MOTORWAYS AND DESIGN

THE statement on Motorways issued on April 8 by the Royal Fine Art Commission should add considerable weight to the views already made public by the RIBA, the Town Planning Institute, the Central Council of Civic Societies and the Civic Trust. Briefly, the point at issue is the need for architectural collaboration from the outset on the study groups which are being set up by the local authorities in the more densely populated areas through which new motorways are to be cut. The choice of interests to be represented on these groups so far is left entirely to the local authority, though as a result of pressure the Minister of Transport and the Ministry of Housing and Local Government are reminding local authorities concerned of the importance of including architectural representation.

What Mr. Watkinson, the Minister of Transport, must do, and we shall hope will do quickly, is to give the clear lead which the Royal Fine Art Commission now calls for. As the Commission states: 'The outlook and achievements of this country in this generation will be judged in no small measure by its major engineering works. It would be a grave indictment of the way the present opportunity is being handled if our new motorways fell short in any respect of the highest standards of which we are capable.'

The RIBA followed the RFAC's statement (reproduced in *The Builder* of April 10) by the issue of another statement of their own on the subject, in which the architect's claims to representation throughout the preparation and planning of the urban motorways were reiterated. As this latest statement—which is published on another page—warns: 'Certain local authorities are at the moment setting up joint committees to consider the future development of urban motorways and feeder roads. The RIBA is deeply concerned that none of these committees have so far decided to include an architect.' However hard it may be for him to adopt a more forthright policy on architectural representation at this stage, Mr. Watkinson will be a rash man if he decides to ignore such authoritative professional advice.

Notes of the Week

York Academic Trust

THE 1958 annual report of the York Academic Trust issued from St. Anthony's Hall, York, contains details of the work and progress of the Institute of Advanced Architectural Studies which has organised an expanded range of courses in the field of post-graduate and advanced architectural training. Seven of these courses were held in 1958 for post-graduates and three for architectural students, including a new four-week course on Architectural Design, intended for those studying part-time for the RIBA examinations. Of the three summer schools for laymen, a new one was on the history of railway architecture in Britain, among the lecturers being Professor Henry-Russell Hitchcock. This school is to be repeated this year with additional lectures on canal architecture. Equally successful was the Churches Inspection Conference, attended by some 120 architects and diocesan representatives; this has led to the setting up of a special committee, which includes the Director, Dr. Singleton-Green, to consider methods of training architects in this field.

* * *

THE TRUST is indeed to be congratulated on the lively, valuable quality of the various branches of its work. The more recent experiment at Edinburgh largely sponsored by the Nuffield Trust apart, the Institute of Advanced Architectural Studies offers the only opportunity in Great Britain for post-graduate work in architecture. That it has commanded so much support both financially and in numbers of students is to be regarded as the measure of the need it fills.

Made in England

THE usual practice of having large embroidered wall panels made in France for buildings designed by British architects—whether the buildings be in this country or overseas—has been happily broken in the case of an 80 ft. by 40 ft. panel for a new building in Kuwait (rumoured to be a palace for the Sultan), for which Messrs. Farmer and Dark, FF/RIBA, are the architects. The highly colourful panel itself, which was designed by Mr. Geoffrey Clarke, ARCA, in collaboration with the architects, was shown to the Press and others last week at the British Colour Council's offices in Portman-square, W1, at a champagne party given by Hampton & Sons, Ltd., who are responsible for furnishing the building.

It was impossible to find a British firm to undertake the work in tapestry, but to their credit the architects persisted, and eventually Arthur H. Lee & Sons, Ltd., Birkenhead, agreed to make it in petit point embroidery, which is much finer than tapestry and permits of great accuracy in interpreting the artist's design. The symbols chosen for the work were fish and pearl oysters, appropriate to the earlier history of Kuwait, and the result, all were agreed, was highly satisfactory.

AA Annual Reception

THE recent decision of the Architectural Association's Council to charge members £1 for attendance, instead of admission being free, reduced the numbers present at the annual reception on April 16 by nearly a third compared with recent years. This had some advantages—it was much easier to circulate around the building than usual—and no doubt the President and Mrs. Clarke Hall found the task of shaking hands with 620 members and guests compared with the normal 850 to 900 a good deal easier than their predecessors. Nevertheless, those with the wellbeing of the AA at heart will hope that the new charge will not permanently reduce the attendance.

But if the numbers present were smaller, the standard and variety of entertainment available, in which were included no less than five exhibitions, was well up to standard. The personal appearance twice in the evening of Miss Jacqueline Mackenzie was undoubtedly the main attraction to many, but the performance by Professor Bruce Lacey and Mr. Ted Dicks, with magic lantern slides, from 10.30 until midnight, was also very well received. Exhibitions included paintings by Messrs. Roger Hilton, Ivon Hitchens and Patrick Heron; sculpture by Mr. Eduardo Paolozzi; and work by AA students. Dancing to Lou Preager's Band and Eric Silk's Southern Jazz Band rounded off a full and successful evening.

Canadian Housing Awards

THREE REGIONAL and two national awards offered by the Canadian Housing Design Council for house design and housing layout were given to Brad Industries, Ltd., at a ceremony in Ottawa on April 6, by the Hon. Howard C. Green, Canadian Minister of Public Works. Brad Industries was founded some three years ago by Mr. James Riley who collaborated in post-war years with Messrs. Newsum Sons & Company in the production of the Riley-Newsum house for the export market.

These awards, for which houses built at any time within the past four years were eligible, were the first made in Canada to prefabricated houses, and as such represent a considerable triumph for British design, for the Brad examples are direct descendants of the original Riley house erected at Wythenshawe, Manchester, which later evolved into the Riley-Newsum house which was exported in large numbers to Australia and elsewhere. The British design team includes, in addition to Mr. Riley, Mr. W. G. Cook, who was trained at the Leeds University School of Architecture.

* * *

JAMES RILEY tells us that they are particularly gratified by the awards in that the conditions of the contest do not place any imposition whatever upon cost, and his firm is concentrating essentially upon the low-cost housing field. It is a fair deduction from this that the Canadian building industry is becoming even more skilled in the utilisation of shop fabrication techniques and more than ever concerned with the significance of good design; and that both public and architectural profession are accepting the implications.

Building Trade Films

ABOUT SIXTY PEOPLE recently attended a conference, called by the RIBA public relations committee's film sub-committee, to discuss technical films with representatives of the building industry and other interested bodies. There was a

good deal of discussion on production and other points, and one practical suggestion at least emerged. This was a proposal, made by Mr. Yeomans of the LMBA, that a study committee should be formed, preferably under the auspices of an independent body, which should consider what sort of film is required by those concerned with the building industry. This suggestion received a good deal of support, and the sponsors of the conference are considering how this might be done.

Guildford Cathedral Appeal

AN URGENT appeal for £175,000 to complete the main body of Guildford Cathedral was made on Tuesday by Lord Bridges, Vice-Chairman of the Guildford New Cathedral Council when he gave some details of the progress made since building re-started eight years ago. Only the great West End was now needed, he said, to complete the main building. The architect for the cathedral is Sir Edward Maufe, RA.

The £300,000 that has been collected since the war has been well spent. Lord Bridges said that the chancel of the new cathedral, the side chapels, the central crossing, and the galleries have been completed. Construction of the nave is very well ahead. The pillars, the vaulting and the walls, all, with the important exception of the West end, have been put up, although the interior finishing work remains to be done.

Lord Bridges added that the West end could not be left open to the sky, and if the money now called for was not forthcoming a temporary wall, which would cost £5,000 and which would be money thrown away in the long run, would have to be built. Donations should be sent to the Secretary of the Guildford New Cathedral Appeal, Diocesan House, Quarry-street, Guildford.

URBAN MOTORWAYS

Statement by the RIBA

THE Royal Institute of British Architects has issued a statement on the need for the inclusion of architects in the design teams concerned with drawing up plans for urban motorways.

Introducing the subject at a Press conference held at the RIBA on April 15, the President, MR. BASIL SPENCE, OBE, ARA, ARSA, emphasised the importance of avoiding the great blunders and mistakes that had been made in the past with the coming of the industrial revolution in the design and siting of the new motorways. This was a problem, he said, that needed to be looked at in the round—there was a place for all opinions, not least those of the architect. The motorways would cost millions of pounds, and for economic reasons it would obviously be impossible to undo such costly mistakes in the future.

MR. LIONEL BRETT, Vice-President, RIBA, who answered a number of questions on the subject, said that motorways in the open country were primarily a problem for landscape architects, but the RIBA was more immediately concerned with the urban motorways. Making the city architect a member of the 'study group' concerned with a particular project was the obvious way to implement the RIBA's recommendations, he said, and indeed he believed that in the big cities the city architect should be the leader of the group. In towns and areas too small to employ their own official architect architectural consultants should be employed.

Official Statement

Following is the text of the RIBA's statement:

THE Royal Fine Art Commission has just published a statement on Motorways [reproduced in our last issue], which the RIBA supports wholeheartedly. It is a vindication, from an uncommitted body, of the RIBA's contention that architectural advice from the very beginning is essential in the planning and design of Motorways.

The Problems.—The RIBA welcomes the opportunity that new motorways give for imaginative design. However, they also raise many new problems, social, æsthetic and psychological, apart from the economic ones they seek to solve. And it is when they meet and have to feed their traffic into a city or town that the motorways give rise to the most complex three-dimensional problems.

The effects of the Urban Motorway.—The Urban Motorway has to have the capacity to carry enormous traffic loads (about three times anything known in this country today) into and through our ancient and complex urban areas. It must inevitably involve the demolition of large numbers of buildings, the cutting of existing communications and the appearance of an entirely new scale in our townscapes. Some parts of cities can absorb these changes to visual advantage; in ot. ers they would be a visual disaster. Thus the location of urban motorways (and not merely their design) is inseparable from the problems of three-dimensional planning and civic design as a whole, and must be studied by those best qualified in such matters.

Raised Motorways.—Where, as must often happen, high-level motorways are the only economic solution, all these problems are aggravated. If insensitively sited and clumsily designed, such roads will destroy the appearance of the town completely, stabbing like a sword into its very heart, as so many of the American motorways have already done. If well designed, they may be majestic and exciting and open up new possibilities for urban renewal.

They can be symbols of inhuman scale, establishing tyranny over the economic life of the town; or they can enhance its scale and dignity, and be things of grace and beauty in themselves.

The Architect's Place.—The root of the architect's argument is that no benefit will come from calling him in merely to design the bridges and service buildings along the motorway. His advice is necessary from the very moment when it is decided to investigate the problem, for he is trained to think in terms of the total human environment. It is the RIBA's contention that such an approach is absolutely essential if we are to be the masters and not the servants of our own inventions.

What can be done now?—Certain local authorities are at the moment setting up joint committees to consider the future development of urban motorways and feeder roads. The RIBA is deeply concerned that none of these committees have so far decided to include architects.

If, as we have shown, the architect is not only concerned with the design of road accessories, but also has a vital part to play in the fundamental planning of the roads, then it would be tragic if these committees continued to ignore his contribution.

It is only by making use of the best possible advice from all quarters that our towns and cities can avoid the monstrous mistakes of the past.

THIS VIEW OF CLEVELAND, OHIO, is a good example of the disintegration of the urban pattern that can be brought about by the new motorways. (See RIBA statement on Urban Motorways, this page)

AN ARCHITECT AT LARGE

By Arthur W. Kenyon, CBE, FRIBA

3—SOUTHAMPTON TO SALISBURY

FROM Southampton I was bound for Salisbury, but the day was very beautiful and there was time to fit in a drive through the New Forest, that stretch of fair England with woodlands and forest clearings, wild ponies and cattle, leading down to the Solent. Lyndhurst, Brockenhurst, Lymington, Christchurch Priory, Beaulieu, Dibden Purlieu, Buckler's Hard—all names to conjure with, and on a bright morning in early spring with the sunlight gleaming through the still bare branches of the trees, it seemed that only by a miracle could Marble Arch be less than a hundred miles distant. Yet my Automobile Association book told me that Lymington is 93 miles from London and the A.A. book cannot lie.

I stopped at the Rothschild estate in Exbury where Peter Barber, the Agent and world-wide authority on orchids and rhododendrons, drove me round the miles of gardens showing me the first rhododendron flowers, early witness of the glory yet to come in May and June, and the fabulous orchids, the corms of which were priced at around £250. I saw how the estate, almost derelict, I understand, at the end of the war, had been groomed and cultivated into its present state of thriving industry with an international supremacy in orchid-growing horticulture, and I heard something too of the problems of running such a place. Driving on to Salisbury in the late afternoon, I thought how the architect's struggles in private practice in aiming at perfection whilst battling with problems of staff and the cold facts of income and expenditure accounts, have their counterpart in other spheres of activity, even when Rothschild is the name. The dreaming spires of Salisbury can never fail to lift the spirit, and as I took in again the green serenity of the Close and its precincts, I felt that this was rarefied living indeed. Despite the infallibility of the Automobile Association's statistics, this was certainly no mere hundred miles from the high density development in Lambeth which I had been inspecting a short week ago. Not only miles but centuries lie between the two.

But enough of orchids and cathedral closes: my assignment was with matters more practical, and I had an appointment with two keen and enthusiastic architects, Robert Potter and Richard Hare, who are running a flourishing practice from pleasant offices in a charming house just outside the Close. They have work spreading all over Southern England, a great deal of it church work, but also including civic centres and a students' hostel. A very pleasant and healthy practice this and not noticeably different from London offices, I would say, except in minor details. Problems of staff were once again uppermost in the partners' minds and we talked much about architectural education. They propounded my age-old theory that students should have a break after their third year to go into an office or on to sites for a year before completing the remainder of their training, and they agreed with me that this was no longer something to be talked about but something to be done.

Taking City Fathers to Task

I preached the gospel here, as elsewhere on my travels and with ever-growing conviction as I continued my journey through these lovely old towns of Hampshire and Wiltshire, that the local architects ought to be taking the city fathers sternly to task on their street architecture. The bad fascias and grotesque shop fronts which are everywhere insinuating themselves into the street façades ought to be a burden on the consciences of the local architects. Theirs is the informed opinion and theirs is the voice that should be heard, loud and strong. But voices are not very strong, I fear, in this profession of ours, and when there is shouting to be done, the politicians and big business firms have won the day whilst architects are busy taking breath.

Time was getting short and the last afternoon of my pilgrimage was to be spent with James Burford, who lives in a place with the delightful name of Codford St. Mary, a few miles from Warminster. Burford runs a very individual sort of architectural practice and one which is possibly unique. He works perhaps without staff from his own house and he specialises in the restoration of old houses, churches, almshouses, barns and the like. He is essentially a craftsman/architect and I should imagine he works more on the job than on the drawing board. Some of his before-and-after pictures were really exciting and he brings great knowledge and skill to his work. His own stone-mullioned house and cottage had great charm and when he showed me the 'before' pictures of the ruin which it had been, I was vastly intrigued by his ability to bring this building back from the dead to a state where his sherry could again be consumed in elegance.

But my afternoon was quite made by the final visit of my tour which was to an old Elizabethan house near Devizes which Burford had altered for the present owner, Colonel Stancombe who, with his charming wife and no less charming daughter of six, entertained us to tea. The house was exquisite both in itself and in its furnishings. The restoration work could hardly be detected from the original and the whole thing to me was a jewel of domestic architecture. The hall which was used as a dining room went up the full height of the house with beautiful wooden mullioned windows and stained glass: the roof truss, beams and great open fireplaces were all of the best. A newly devised small staircase from the hall led to two charming bedrooms and there were other bedrooms leading by a staircase out of the study. The antique furniture which looked as though it had been specially made for the house was polished like glass, and much of it had been handed down with the house where it truly belonged.

As I came away I thought of the service which architects like Burford are doing for architecture in preserving houses like this, and I wondered whether a 'Falling-Water' could hope to survive the centuries with such enhancement of character and charm as this simple Elizabethan home.

And so back to London once more, to the drawing board, the sites and the committees but not without giving myself time to reflect and to set down any thoughts which might be of value or interest. Whatever my limitations may be—and they are many—I regard myself as a good loyalist in the common cause, and I believe that much good could come out of the sort of personal contacts which I had been fortunate enough to enjoy and from a more intimate knowledge of the work of one's colleagues. One thing

my journey proved to me, if nothing else —that we who live at the centre of things in London, rubbing shoulders daily with the 'lions' of our profession and taking counsel with the pundits of big building, are in real danger of forgetting our hard-working brother architects and builders in the country. We live in an age of stars and names that dazzle, and this is not altogether a bad thing, for it is a poor age that does not throw up its geniuses and its leaders. But there is also much quality and skill to be found elsewhere, and it would be a pity if those who have it in their power to lay down the rules by which great and small must abide, did so in the interest of the few rather than the many.

Some of the people I met were so bogged down in their daily work that they had time neither to know nor to care about what went on outside their own file and sample-littered offices. Sufficient unto them were the harassments of the day and the need to have the vicarage roof finished before Easter. They also serve; for more often than not the roof will be done soundly and well and with far more care than it would get from the junior assistant on his day visit from the 'lion's' office in London. But others spare time from their labours to read a little and think a little and to take part in the activities of their local societies, and these are the voices that should be heard, for they speak with authority and judgment on the local matters in which their interest lies.

'Go to the Provinces'

I have often said to young architects who have sought my advice on what course to take in pursuing a career of private practice —'Go to the provinces, young man. You will find a niche there!' This was not meant to be a judgment on either the young man or the provinces, but it was carefully considered advice offered with knowledge of both kinds of practice and based on an opinion, in which I am now further strengthened, that some of the best and most serious work is done in the country outside London. The architects who are already established there in hard-working private practice naturally do not welcome the idea of the best local work being done by the national 'stars' but they do want—and want very badly—some of the better young men starting out on their careers to join them and work with them bringing all their new ideas with them to refresh and revivify their practices. I met architects who were crying out for good assistants, and I met others who were working most successfully and happily with young men who had recently joined them in varying forms of association, usually leading to eventual partnership: in many cases these young men had come from London where they they had no wish to return.

Many of our problems are, of course, common to all kinds of architectural practice, whether in London or the provinces. Staff difficulties and client troubles are the common cry of all, whilst anyone who has had to work on the special scale of fees for state-aided housing cannot be expected to be unaware of its iniquities. I heard hard things said on more than one occasion about the RIBA's methods of dealing with this.

I also heard critical opinions of the attitude of the RIBA to provincial interests generally, and there seemed to be a feeling abroad that provincial architects, except for one or two names that have hit the headlines, are regarded as the poor relations of the profession.

I make these points for what they are worth and in the hope that they may be read without hard feelings by those whose influence lies in a sphere where some improvement might be effected. Nothing will ever work perfectly for all the people all the time, but at least we can try in our endeavours not to lose sight of the millennium.

For myself, honour was satisfied and I felt my spring-time promptings had not been entirely fanciful. At the lowest assessment I had had a most pleasant break from the daily round and had met and talked with interesting, charming and talented colleagues. At a higher assessment I might have gained some useful knowledge and certainly a better appreciation of the problems of my fellow workers in the profession of building. And at an even more optimistic and perhaps a slightly conceited level, I might even have done a slight service to the common cause. With such high thoughts I am content to return for a time to my drawing board.

CORRESPONDENCE

RIBA Constitution Proposals Under Fire

To the Editor of *The Builder*

SIR,—I write to support the two leading articles published in *The Builder* recently dealing with the views expressed by Mr. Leonard Howitt and the recommendations published so far of the Constitutional Committee of the Royal Institute of British Architects, and have the following comments to make:

1. I am very strongly of opinion that the first and most important matter that the Constitutional Committee should have considered and reported upon is a revision of the Charter, so that any vital changes in the constitution of the RIBA should be carried out after a postal vote of all its members and not by the out-of-date method of an unrepresentative General Meeting in London.

2. I entirely agree with you that we want the best and most experienced architects to represent us on the Council of the RIBA, and I consider the method proposed for dealing with members in Allied Societies districts will not be conducive to produce this result. I agree that all members of the RIBA should automatically become members of the Allied Society in their area, but I consider that the best and most efficient way to obtain the person most suitable to represent the area on the RIBA Council would be for the Allied Society themselves to conduct an election for their own Council by a postal vote as they do now, and then to elect from the members of the Council the representative or representatives for the RIBA Council.

3. I consider that the Constitutional Committee's proposals in this matter will eventually lead to an overpowering centralisation of authority which could quite easily be completely dominated by architects resident in London and Middlesex.

4. I am of opinion that the present proposals which have received formal approval of the RIBA Council should be referred back to the Constitutional Committee, and that they should be asked to reconsider them after conferring again with the Allied Societies in a manner similar to that which apparently they propose to adopt for the Allied Societies of Scotland, Northern Ireland and Eire, and also I would suggest that the question of the formation of a new Allied Society to cover the London and Middlesex area should be re-opened.

5. My last thought is that the whole of these proposals, which are probably going to affect the Royal Institute for the next 100 years, are being far too hurriedly dealt with, and that all members, not only in Great Britain but right through the whole world, should be given ample time for consideration and study of this very vital problem.

STANLEY W. MILBURN [FRIBA].

9 The Esplanade, Sunderland.

The Classical Tradition

To the Editor of *The Builder*

SIR,—The case made out by Mr. Bryan Harvey in his RIBA paper (reported in *The Builder* last week) for our early industrial architecture being a continuation of the classical tradition of the 18th century is not likely to be seriously disputed. Not everyone, however, will agree with his apparent belief that because the classical style has a recognised system of proportions it must necessarily endure and that there can be no lasting alternative to it.

As you say in your leading article, 'it is a remarkable fact that today there is left only a tiny minority of architects able and willing to accept the classical discipline.' The reason for this is partly because architects cannot afford to 'swim against the tide,' but mainly

because the generation of classically-trained men is dying out. It may well have disappeared in a decade, for it is not being replaced. The classical style is virtually dead because of the revolutionary changes in structure. It seems unlikely that there will ever be a general return to the irrational practice of using classical forms as a cladding for frame or cantilever construction, least of all for high buildings.

In years to come the classical work of our century, good as much of it is, may be looked back upon as a greater 'aberration' than medieval Gothic seems to be to Mr. Harvey. If this was an aberration it was at least a spontaneous growth.

SPERO.

A Question of Design

To the Editor of *The Builder*

SIR,—It is surely the established idea that architects should be employed in providing buildings of pleasing aspect, but more and more we see large numbers of newly erected public buildings which could very well be designed by structural engineers, and indeed, even by the builders themselves. One has only to walk round the City of London to see the growth of giant box-shaped structures without any pretence to beauty or relief from the straight line.

This trend of utilitarian design seems to have reached a nadir in the elevation of some hospitals. Drab and depressing exteriors can only react on patients as well as the staff of a hospital building.

Is it not time that public authorities encouraged architects to pursue their rightful calling by rejecting solely utilitarian designs?

S. A. BUNNELL [MICE].
26, Frimley Hall Estate, Camberley.

New Brick Design

To the Editor of *The Builder*

SIR,—Being of an inquiring mind and still eager to learn, I was very much interested in the illustrated article on the Building Trials of the V5 Brick at Aylesbury, on page 741 of *The Builder* of last week. From a study of this article purely, and no first-hand knowledge of the trials, I could appreciate that the new bricks were easy to handle and still left the bricklayer with a two-handed job while yet giving the opportunity for twice the amount of brickwork to be laid.

Apart from the difficulties of manufacture of this multi-perforated brick, which must have undergone extensive production trials, there is one thing I cannot understand which raises doubts in my mind that I would like explained by the promoters. First of all, the old-fashioned standard-size brick, built in to an 11 in. cavity wall with cavity lathes suspended during the operation of building, obviated any possibility of the accretion of mortar droppings building up above the level of the damp course. How is this particular wastage and also dangerous accumulation of mortar to be obviated with the new brick? I feel that the new design is highly vulnerable to human frailty in this respect.

Second, the old 11 in. cavity wall with the twisted metal cavity tie provided a drip for any perforating dampness. It seems to me that the connecting divisions of the new brick across the larger cavities where the hand hold is would constitute avenues for moisture absorption.

I should, however, like to try these bricks on one or two small projects in my area. Would you please give me the name and address of any local brick manufacturers contemplating their production?

A. N. HARRIS [FRIBA]
County Architect, Northamptonshire,
County Hall, Northampton.

Rating of Contractors' Huts

To the Editor of *The Builder*

SIR,—With reference to the letter in *The Builder* of last week on the rating of contractors' huts, the authorities which Mr. Powell is looking for can be found, I think, in the judgment of Jenkins, L. J., in the Court of Appeal (L.C.C. v. Wilkins, Valuation Officer, 1955, All England Reports, Vol. 2, Page 180). He should, however, also read the speeches delivered when the same case reached the House of Lords. They are reported at 1956, All England Reports, Vol. 3, page 38.

D. C. MALLAM.
14, Bryanston-street, W1.

Measurement on a Decimalised System

To the Editor of *The Builder*

SIR,—With reference to Mr. Shipley's letter written on behalf of the British Association for the Advancement of Science in *The Builder* of last week, I suppose to a habitual provoker like myself nothing should come as a surprise, and an occasional arm-twist in the shape of such a letter is not unpleasantly salutary. Did Mr. Shipley but know it, and despite the recent attention given to it by the BA, with too few others I have been trying to blaze a trail for the Metric System in our industry for years. Accordingly, in an attempt to emphasise the possibility of an interim introduction of decimalisation of the Imperial System (not Metric as Mr. Shipley's letter was headed) of weights and measures as an alternative to the full Metric System I indicated that the proposal to adopt the '100 foot units' was under consideration.

In my possession I have two different forms (received presumably from the Association's Metric Committee) each of which has on the cover page 'Metric System and Decimal Coinage Inquiry.' One form runs to ten and the other to five pages. Each contains a 'Section B,' under which replies are invited in regard to 'specific proposals' for the 'rationalisation' or decimalisation of the Imperial System. As a person competent (at least in the opinion of two of the organisations assisting with the inquiry) to reply, and having had a 'specific proposal' saved up so long, I included particulars of the '100 foot unit' in each of my replies to the relevant questions, much on the lines quoted by me in your March 20 issue. Having taken no little trouble to assist in these inquiries and having forwarded the reply data through two concerns acting as collecting-agents for the BA to the Committee, I think I should be entitled to some credit for attempting something towards 'the Advancement of Science' in putting forward the 'Unit' whilst according acknowledgment to the Association's investigation.

Possibly before reaching Mr. Shipley's inner sanctum, my replies (with others from individuals like me) have been chopped-about or eliminated, but in this case I believe that—if he will take my word for it that 'square' has long been accepted in this industry to mean '100 feet'—he will be able to trace amongst the material submitted to the Committee, that reference was made to my suggestion that 'the square' could be adopted as a 'unit' for length, area and volume, or so I have been reliably informed.

I am glad to have been the cause of giving Mr. Shipley an opportunity to publicise the good work of the Metric Committee whose report will be eagerly awaited, and we may hope that our industry will continue to be aware of its need for rationalisation at all levels. It should thus be more ready and willing to accept the Metric System and Decimal Coinage, as assuredly come they will. At the best, the '100 foot unit' could only be introduced as a half-way 'measure' and was described in my March 20 letter primarily to accommodate your correspondent Mr. Berry and others similarly interested in the decimalisation of our existing measures whilst alluding to the BA's request for ideas for such conversion (to quote an inquiry form) 'if it proves impracticable or unacceptable to adopt the metric system in the UK,' i.e., as alternatives as indicated in my letter.

G. E. ALCOCK [AIOB, FIQS].
30 Christchurch Park, Sutton, Surrey.

'I'm afraid that's not quite the sort of architectural treatment the Minister has in mind for our motorways!'

An Advisory Research Panel

At the invitation of the Timber Development Association a sub-committee of the National Council of the Timber Building Manufacturers Association of Great Britain has been formed to act in conjunction with the TDA as an advisory research panel for the timber building industry. It is anticipated that the panel will suggest to TDA items that might usefully be included in future programmes for research and development. The association's annual general meeting has been convened for June 10, at the Café Royal, Regent-street, W1, at 11.15 a.m.

OBITUARY

C. H. Aslin, CBE, P-PRIBA

THE death took place on April 18 of Mr. Charles Herbert Aslin, CBE, Past President of the RIBA and County Architect of Hertfordshire (a post from which he resigned only at the end of last year) during the post-war period when he assembled a team which, under his leadership, developed the Hertfordshire schools programme of prefabricated buildings. He was 65.

Born in 1893, Aslin studied at the Department of Architecture in Sheffield University and in 1926 became architect to the County Borough of Rotherham. In the same year he took up the post of deputy county architect of Hampshire and in 1929 went as borough architect to Derby. In 1944 he transferred to Hertfordshire as County Architect where, faced with an exceptional programme of schools and a scarcity of labour largely due to the new towns programme, he brought together a team of assistants (who included S. A. W. Johnson-Marshall, David Medd, Mary Crowley and Dan Lacey) which developed under his guidance a form of construction using light-steel welded frames and a variety of cladding materials, much of which was fabricated off-site. These schools (the hundredth of which, the Templewood School at Welwyn Garden City, was opened by the Minister of Education and gained the medal of the Essex, Herts and Cambridge Society in 1951) have achieved an international reputation, as much for their intelligent use of colour as for their economical planning and use of moduled construction. Aslin was also a pioneer in group working, teams of architects carrying out projects under his sympathetic leadership. As a county architect his particular genius lay in selecting competent helpers and then in giving them the freest of hands. He was generous in praise.

Aslin became President of the RIBA in 1955, and in that year and the next pressed forward the claims of reorganisation of the structure of the profession and the architectural education and training of architects. He may not go down in architectural history as one of the greatest of RIBA Presidents (his interests lying in organisation rather than in the art of architecture on which his pronouncements, though commendably brief, suffered somewhat from a casual style of public address which masked an innate earnestness), but few Presidents have excelled him in charm of manner and in kindliness. In all he did for the Royal Institute he was greatly helped by his wife (whom, as Ethel Armitage, he married in 1920).

The late C. H. Aslin

He was made CBE in 1951, was an hon. Fellow of the American Institute of Architects and a member of the Institution of Structural Engineers and of the Royal Society of Arts.

Sir George Lionel Pepler

THE following memoir on Sir George Lionel Pepler (whose death on April 13 was recorded in our last issue) has been contributed by Mr. James W. R. Adams, OBE, Past-President of the Town Planning Institute:

IT IS NOT AN UNCOMMON EXPERIENCE to find that an eminent member of a profession is well known by reputation to all members of that profession, but is personally acquainted with very few. George Pepler was not only an exception in this respect, he was probably unique in that he was, for some forty-five years, the friend and adviser in quite a personal sense to nearly every member of the Town Planning Institute, of which he was one of the founders. His loss to the profession and to the communities in which he lived cannot be exaggerated. During his long career as chief planning adviser to the Government Department responsible for town planning (a post which carried different designations from time to time), he also became personally known to, and must be affectionately remembered by, numerous members and officers of local authorities throughout England and Wales.

George Pepler was born in 1882 and, after leaving Leys School at Cambridge, a city which ever afterwards held a special place in his heart, he qualified as a chartered surveyor and commenced practice with Ernest Allen. Later he was associated with Thomas Adams, and in 1914 succeeded Adams as the chief technical planner of the Local Government Board.

George Pepler preferred persuasion and negotiation to compulsion, and had a deep love of humanity. These and his other qualities enabled him to achieve considerable success in securing the formation of joint standing committees, both executive and advisory. His interest in the education of town planners is fairly widely known, but the time he devoted to the services of students of the Town Planning Institute is probably little realised outside that body. For many years he was an active examiner in connection with the Institute's examinations, and later served on the Joint Examination Board which was set up by that body and its sister professional institutes. Pepler acted as external examiner at most, if not all, the recognised universities and schools of Town and Country Planning or Civic Design, to which institutions he also paid many visits as a member of the Town Planning Institute Visiting Board. He succeeded Thomas Adams in 1940 as President of the Town and Country Planning Summer School, and had for many years past conducted in a firm but fatherly way the sessions of that annual refresher course.

The late Sir George Pepler

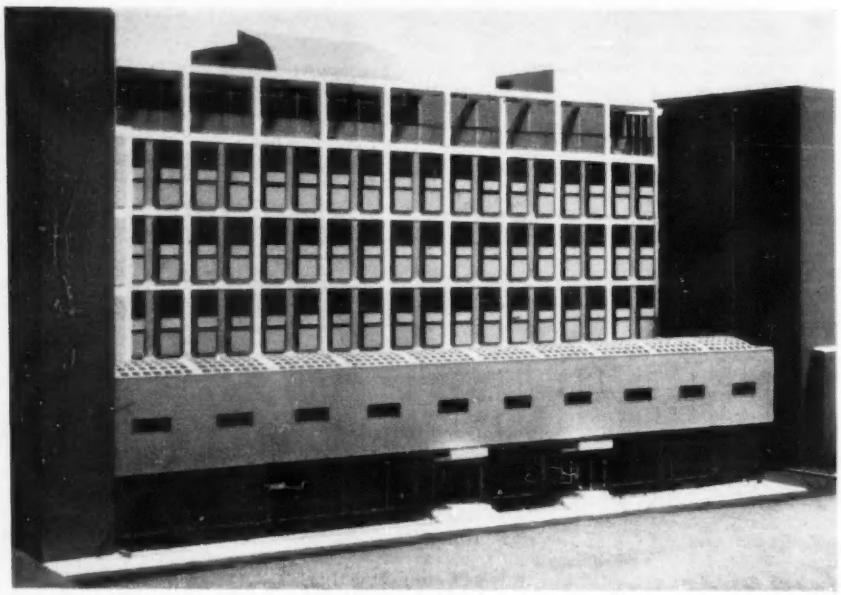
Towards the end of the last war Pepler became chairman of the Inter-Allied Committee for Physical Planning and Reconstruction, and his Quaker background no doubt partly explained the delight with which he welcomed the revival of the activities of the International Federation of Housing and Town Planning when the war ended. He had been President of that body from 1935 to 1938, but his second presidency lasted from 1947 to 1952 and greatly raised the esteem in which he was held throughout the civilised world.

George Pepler held many other offices, in all of which he was active. From 1937 to 1942 he occupied the chair of the Institution of Professional Civil Servants, and had been a member of the Council of the Town and Country Planning Association since 1919. He was also associated with the National Playing Fields Association, and was a member of the Royal Commission on Common Land. After his retirement from the Civil Service, Pepler returned to private practice, and is remembered for his regional plan for the North East Development Area, in association with Mr. P. W. MacFarlane, and for his work for the Singapore Improvement Trust. His honours were many. His CB was followed by a Knighthood in 1948. He was the Honorary Secretary and Honorary Treasurer of the Town Planning Institute from its foundation in 1914 until his death, and was on two occasions elected President of that body. He was a Fellow of the RICS and an Hon. Associate of the RIBA and was a member of other organisations too numerous to mention, including a number of foreign professional bodies. He was the first recipient of the Gold Medal awarded by the Town Planning Institute.

Pepler's son and two daughters by his first marriage (his first wife died in 1942) and his second wife, formerly Elizabeth Halton, whom he married in 1947, survive him.

F. J. Osborne, MC, FRIBA

THE DEATH has occurred at Solihull, Birmingham, of Mr. Frank John Osborne, MC, FRIBA. He was 73.



The Fulham-road elevation. This model illustrates the completed building as a whole, although the Institute will only occupy the right-hand end as shown on the plans

Extension to the CHESTER BEATTY RESEARCH INSTITUTE, Fulham-road, London, SW3

Architects:
LANCHESTER & LODGE
in conjunction with
SAXON SNELL & PHILLIPS

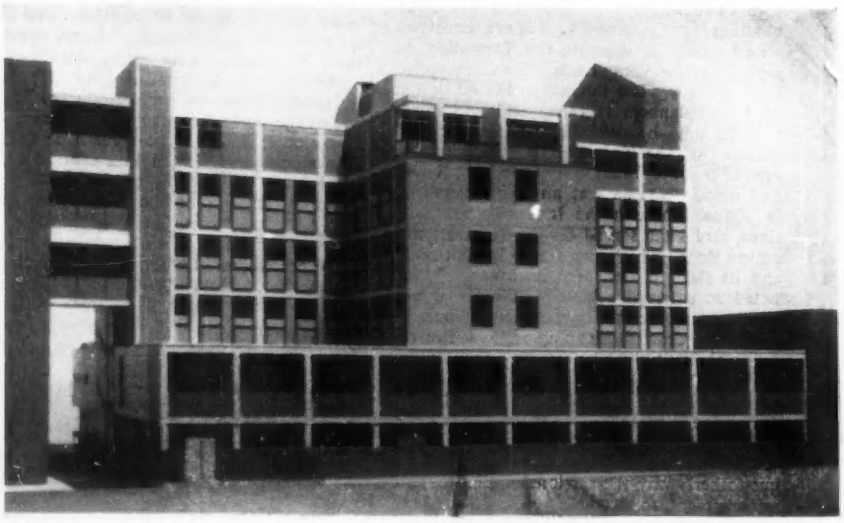
General Contractors:
HUMPHREYS Ltd.

THE site is situated between the existing Institute building and the Brompton Hospital, and is being fully developed by both establishments, but not concurrently, using a half of the site each.

A 5-storey reinforced concrete warehouse occupied one-third of the site and the problem of the demolition of this and the old buildings called for special consideration owing to the close proximity of the Hospital and the Nurses' Home. In order to minimise the use of compressors, the concrete structure was removed by cutting the principle members and areas of floor by the 'thermal boring' method.

It was agreed at the outset that the façade of the whole frontage should be designed in conjunction with the hospital's architects so that the hospital's requirements could be satisfied at a later date. Hence the main spacing of the grid was dictated by hospital needs rather than any laboratory requirements. The extension is to be linked to the existing building by a bridge over Dudmaston-mews on 3 floors and a tunnel at basement level. The form of the building was decided largely by the requirements of Town Planning and resulted in 2 storeys above ground over all the site with 2 small areas and a further 4 floors set back in the centre.

The basement contains the boiler house for both new and existing buildings, main cloak rooms, and an assembly room which, being on the main road frontage, is isolated from the external retaining wall by exhibition cupboards

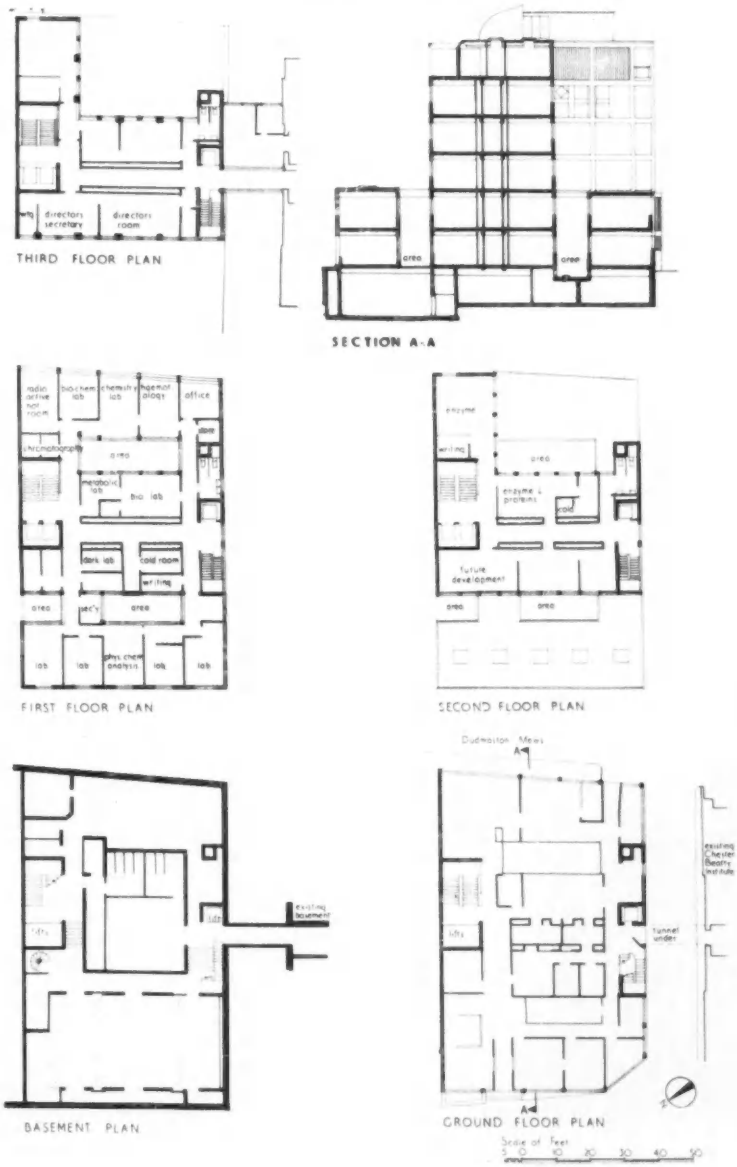


The rear elevation showing the bridge connecting the new building with the existing Institute

to reduce the traffic noise and is completely air conditioned. The ground floor contains administrative offices, photographic department and central stores. The first floor consists of laboratories and the stone façade on the Fulham-road frontage at this floor is pierced with minimum size windows as it was possible to top light this floor and thus reduce traffic noise to a minimum. The upper floors follow similar plans, with laboratories on either side of a central corridor leading to lifts and staircase and connecting to the existing building. The top floor is again set back and is allocated for animal rooms.

The structure is steel framed and external walls have 5 in. concrete panels below cills faced with thermal insulation-backed fibreglass panels. The vertical service ducts form the intermediate panels between the stanchions and are framed in with the windows. The first floor façade on Fulham-road is faced in Portland stone with slate faced columns below on the ground floor. The rear elevations from second to fifth floor have a similar window treatment to those on the Fulham-road frontage with a brick facing for the ground floor and end wall to the second to fourth floors of the projecting wing.

Extension to the Chester Beatty Research Institute



SHOWING THE FLAG

Exhibition of Stepney's Housing

THE Empire-building days are over and so, also, are those wartime occasions when it was considered the correct thing to do to 'show the flag.' In point of fact, it was not always the wisest action even if in far away Whitehall or GHQ it was considered right. Business organisations, with the introduction of PRO's to the fold, a few years ago began to show the public what they could do through the medium of exhibitions. Go-ahead local authorities have followed suit and now it is the turn of the Metropolitan Borough of Stepney.

Until April 30 (at the Central Library, Bancroft-road, E1) there is an exhibition entitled 'Stepney Housing Progress.' Stepney was devastated during the second world war, when only some 2,000 homes survived out of 34,000; the balance being either destroyed or extensively damaged. Much which remained standing was classified as slum accommodation.

The London County Council (Architect's Department) have, on display, a number of projects for the future together with many photographs of work carried out in recent years. The huge development known as St. Annes Neighbourhood stands out as an example of co-operation between architects, planners and landscape architects. The Borough Council (through the Borough Engineer's Department) apparently got off to a much slower start than the County authority but there are, no doubt, reasons for this. It would appear, from the evidence available, that more architectural leadership is badly needed in respect of its housing work.

The Borough Engineer (Mr. H. Gale, AMICE, ARICS) and his staff are carrying out a conversion and improvement programme for both houses and flats which is praiseworthy. It is all too easy for the idealists to wish to bulldoze away the past and rebuild anew completely, but that is not always the answer and realists appreciate this fact. Stepney started as a borough of small houses, and it would be tragic if it became an area solely of slab and point blocks for its housing.

Other work is by private architects; here the difficulties caused by taking names of firms from lists are seen all too clearly. The designs are of very varying quality, with one firm so easily outstepping the two others in terms of design, construction and practicability (all adding up to economy in the long view) that the lessons are there for all to see.

The tie-in with open space development, road improvements, school and shop building was shown sufficiently to indicate that efforts were being made to resolve mutual troubles. Once again, the diagrams showing the chain of authorities from whom it is necessary to obtain sanctions indicate the slowness of the procedure. For the nostalgic there was a replica of a Victorian kitchen.

Is it right for Stepney to 'show the flag' as regards its housing progress? Of course it is, and not only for those concerned with the multifarious aspects of housing but for the people of Stepney.

JAMES C. KENNEDY.

HONG KONG

By LIONEL WEAVER

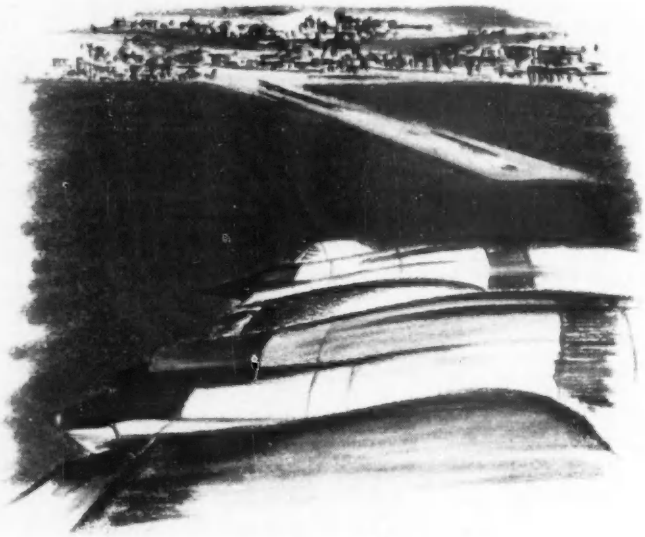
THE visitor to Hong Kong may be prepared for many things on leaving the Kai Tak airport, but he is not likely to be ready for the impact of Kowloon Tong's dense living and shopping quarters.

No architectural grandeur and civic planning here—but street after street of packed humanity. No reticently chosen and self-effacing colour—but all the primaries plus black and gold. And everything speeded up and animated like a Keystone film in which the visitor plays a very minor, but highly active, role.

With London but thirty hours in the past, and Beirut, Karachi, New Delhi, Rangoon and Bangkok but brief periods in that time, Kowloon Tong is as much as the innocent traveller can take without sleep of an adequate kind to furnish him with the nervous energy necessary to absorb more of the fabulous life of the Colony.

Driven to the Peninsula, we registered our arrival. We were then taken straight to a building site for a lightning inspection, after which we were hustled on to the Star Ferry for lunch at the Hong Kong Club. All of which seemed to indicate that, if you are an innocent traveller, you would be wise to avoid Hong Kong.

During our first meal in the Colony, we heard the first references to the passing of the Shanghai Club Long Bar. Most old Shanghai members muse despondently and at length over the loss of the longest of all bars. The absence of this bar, we were to discover, is a source of perpetual grief in Hong Kong.



Approaching the new Kai Tak airstrip

Returning to the Peninsula, fully determined to spend the afternoon in bed and to rise for dinner, we succumbed to the effects of the 8,000-mile journey instead, and did not waken until breakfast time.

From then on, for several weeks, colourful impressions bombarded us like showers of meteors. The influx of Shanghai Chinese and Europeans has made Hong Kong into the most active centre of commerce in the world. Staggering output figures have been reached in every field.

The population of 850,000 in 1938 has leapt to the astonishing figure of 2½m. in 1958, all of whom live on less than 400 square miles of territory. These figures give the erroneous impression that there is such density of population there is no room at all for visitors. In fact, tourism is a very important source of revenue to the Colony.

The architecture, for the most part, is composed of hurried copies of international styles. Fortunately, they differ from the UK examples in being more happily suited to the kaleidoscopic life of the people, and, in the warm climate and clean atmosphere, very much more functional. In a very important way these styles are quite at home.

The speed at which large commissions are executed is exhilarating, but usually results in poor detailing. Fortunately, there is no mutual admiration society of architects in Hong Kong sponsoring glossy magazines and dynamic photographs, and six-figure buildings are rarely given more than a page or two of coverage.

Most of the building work takes place in a region roughly the size of the City and West End of London, and is in constant view. In the absence of a dormitory area as we know it in the UK the city is very much lived in night and day and the architecture forms an integral part of the life of the community.

In the UK but a fraction of the total population sees the architecture of central London. In Hong Kong, on the other hand, half the population sees the important works daily. They view the work directly ; not by way of photography.

Because of this, current building is under constant discussion. In the region from the Wanchai District to West Point, where most of the business of the Colony seems to be done, one is constantly running into friends and colleagues either in the streets or in restaurants. This makes for rapid and smooth liaison in all fields.

A great deal of work is carried out verbally ; correspondence and circularising being kept to the minimum. A handshake is often sufficient to seal an agreement,

Street scene

which used to be the case in London in the days of the coffee house.

The almost complete absence of bureaucracy is largely responsible for the extraordinary industry which has characterised the island since the war.

The problem of caring for the huge number of Chinese refugees from the mainland and Shanghai is one which cannot be solved by social reform alone. The life of the Colony depends on the comparatively cheap labour which is constantly available and which is there by preference, but the Government's building programme for the lower income groups is enormous.

In agriculture, the Government and private enterprise are working together for the full development of the island's resources. Although some delicacies are imported from Manila, the USA and the UK, most of the food is produced in the Colony.

In most restaurants waiters are sufficient in numbers to assure immediate service, and, in the case of Chinese food, the menu is usually ordered earlier in the day to allow it to be prepared in time for dinner. The various dishes are balanced one against the other in colour and texture, the required temperatures and accompanying sauces being given sufficient attention to ensure perfect harmony throughout the meal.

The Metro Ballroom provides a fair example of the good-class night haunt, which plays such a large part in Hong Kong entertainment. Here, the menu consists only of tea or Shanghai Green Tea, which is free, and a number of beverages and cordials with candy and melon seeds.

'Fung Shui'

Fung Shui is a delightful Chinese tradition which still, in one of its aspects, survives in Hong Kong. This is a very ancient form of 'accidental' town planning which often results in a beauty never achieved by European geometrical pattern making, even though we pay an army of qualified Civil Servants to provide it.

Originally confined to the siting of graves, Fung Shui spread to the siting of temples and houses. Because of the desire to build a house facing south, and on high ground to avoid winter floods, the importance of natural features is of much greater importance to the Chinese than to Westerners.

They are quick to see that undulating ground and copses, for instance, may take shapes: that of a lion, or a tiger, a fish, a bird or a dragon. The most important of all animals is the dragon, and whether the feature looks like a lion, or tiger, or man, it is known as the expression of the dragon.

Within the all-embracing shape of the dragon the home builder may discern many other smaller shapes, and if he needs, say, a tiger, he may ignore the rest of the large shape comprising the dragon. He may settle on a site that is slightly behind and above his tiger which allows him to control the beast, and prevent it from eating him when it is hungry. But he must also ensure that his site is not in a disadvantageous position with regard to any other creature —is not in the jaws of a snake, for instance.

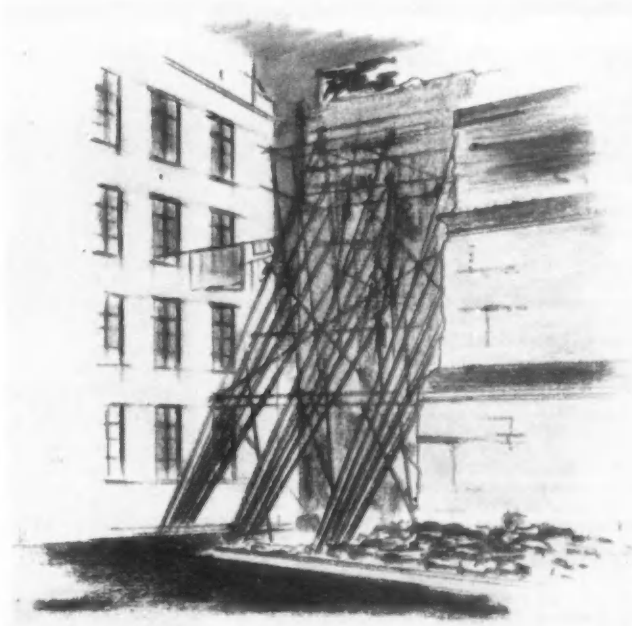
Even the most exhaustive survey, however, may not be sufficient to avoid a dispute with an adjoining owner. The new house may be sitting on the dragon's tail of the site of the adjoining owner. This would lead to an enraged dragon which would bring down dismay and ill-fortune on the owner and on his descendants.

If this unfortunate stage is reached, it is essential to call in a Fung Shui expert, who, after considerable thought, would discover a happy translation and suitably poetic one for the whole problem. His discovery of a 'Celestial Crown on Heavenly Dragon' might lead to a peaceful solution and thus avert strife and bloodshed. His fee varies according to the enormity of the problem and the size of the pocket books of the disputing parties.

But centuries of Fung Shui practice have resulted in Chinese landscape of such beauty that it bears compelling evidence of the deep poetic nature of the people.

We left Hong Kong feeling some slight regret that it can never be a permanent home—except perhaps for the Old China Hands who still dream in terms of the pre-war Shanghai, Peking, Chungking and Canton and, of course, the Shanghai Club Long Bar!

Beach at Castle Peak



Bamboo shoring

RIBA

Examination in Professional Practice

THE examination in professional practice and practical experience was held in London and Edinburgh on April 9 and 10, 1959. Of the 178 candidates examined, 164 passed and 14 were relegated. The successful candidates are as follows:—

G. Adkin, A. W. Albiston, B. J. Aldrich, J. Bailey, V. S. Benstead, J. R. Binnington, R. E. J. Bishop, A. D. Blee, J. D. Bowman, S. N. Boyer, H. J. Bruce, R. K. Bruce, J. K. Bryans, P. F. Buckingham, S. Bunton, J. D. Burniston, R. A. Byrom.

A. H. Caldwell, D. A. Callcut, J. E. C. Campbell, R. M. Campbell, I. C. Carr, W. F. Cashmore, J. Chandler, K. C. Cheeseman, Miss M. M. Claridge, N. C. Clark, G. P. Clemence, M. F. Clements, I. H. Coats, R. S. Collins, B. F. Cottle, P. G. Crane, W. G. Crerar, D. A. Croydon, A. L. Cuming, J. B. Dalton, J. F. Davies, C. B. Davis, B. Davison, P. N. Dean, A. J. De Courcy, M. W. P. De Silva, J. R. Dorrell, D. W. Dry, J. P. Dunn.

H. B. Eaton, J. A. Edginton, D. Edwards, M. G. Engering, L. S. Fairweather, J. E. A. Fenner, J. M. Fetherstone, A. Flinders, A. R. Forster, R. Frew, J. K. Gabb, Z. Gasiewicz, B. J. Godding, B. D. P. Grayling, J. D. Green, A. G. Greenwood, J. L. Gregory, J. F. Hall, K. Harrison, J. W. Harvey, K. R. Hathaway, M. D. Heatley, M. Hellawell, J. D. Helme, W. H. Hill, R. Hodgson, Miss P. G. E. Holliman, P. D. Hunt, A. F. W. Hurley, W. L. James, S. E. James, E. R. P. Jones.

W. H. G. Keal, J. Lamb, Miss B. V. F. Leake, B. S. Lee, A. G. Louden, E. G. Lucey, A. W. Macdonald, I. G. McGill, C. W. McGraw, B. G. Mackley, J. P. McLaughlin, S. B. McMurray, E. Marginson, A. H. Martin, P. V. Meade, K. N. Mehta, D. M. Mellor, D. R. Miller, G. O. Miller, Mrs. S. Miller-Williams, W. E. Milnes, W. F. Milton, W. I. Mitchell, B. G. Moody, S. S. S. Moore, J. E. Moores.

K. E. T. Nugent, F. A. Olver, Mrs. H. W. Orton, G. C. Pereira, G. A. Perrin, I. O. G. Perrott, V. J. Perry, G. G. Phillips, R. Pirn, A. R. Platts, D. Porter, A. R. Powell, P. K. Powell, D. T. Preece, P. T. Presswell, R. Prew, A. K. E. Prior, D. P. Raby, S. G. Ranadive, S. M. Raote, A. F. Roberts, E. H. Robinson, P. C. Roseveare, B. B. Ruane, J. Rumun, J. Ryzowski-Heksel.

V. Sagasti, A. M. Sanderson, J. H. A. Sawyer, J. J. Scott, A. H. Sefton, T. R. Senior, J. Sharp, E. Shaw, J. Shove, D. M. Skinn, J. Smethurst, J. E. Smith, W. E. Spillman, D. J. Stanfield, G. J. Stoble, J. Storie, L. Taylor, P. T. Thrasher, V. T. Uku, A. J. Upton, D. A. Vickers, J. H. Warner, J. C. Watson, D. H. M. Watt, A. C. Watts, A. V. Watts, K. L. Webb, R. J. White, J. Whitehead, R. G. Worthington, B. O. Young, F. A. Young, H. Young, S. A. Zins.

Appointment of RIBA Representatives

First International Conference on Materials Handling: London, May 6/8, 1959.—Eric Firmin (F).

Registered Plumbers Association: Annual Meeting of General Council: Liverpool, June 5, 1959.—L. W. M. Alexander (A).

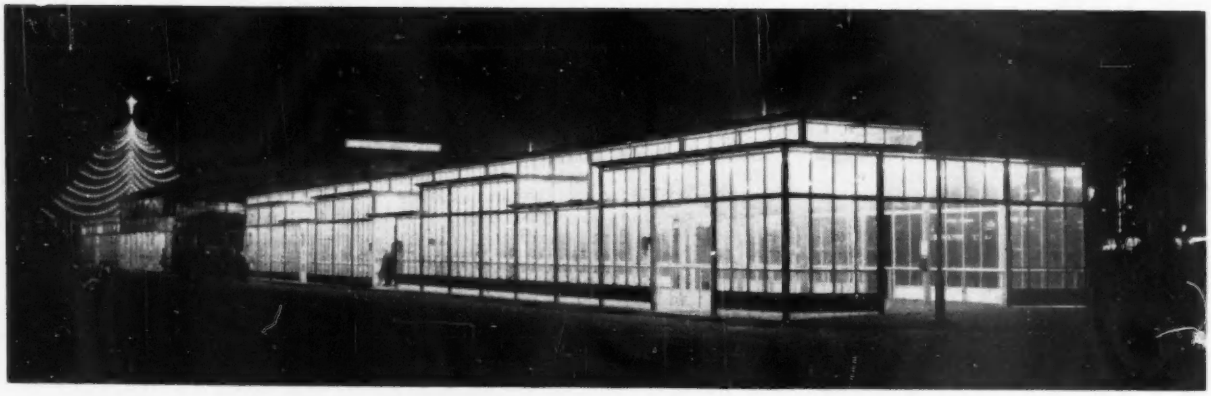
British Standards Institution, Building Divisional Council.—R. T. Walters (A) in place of Thomas Mitchell (A).

Council for Codes of Practice.—H. H. Clark (F) and George Newell (A) in place of Thomas Mitchell (A) and Charles Woodward (A).

Codes of Practice Committee for Building.—R. T. Walters (A) in place of R. N. Wakelin (F).

BSI Appointment

MR. D. R. VICKERS has been appointed an assistant secretary of the British Standards Institution, with responsibility for administering the Institution's certification mark schemes and dealing with consumer goods activities with special reference to BSI's consumer advisory council and the women's advisory committee.

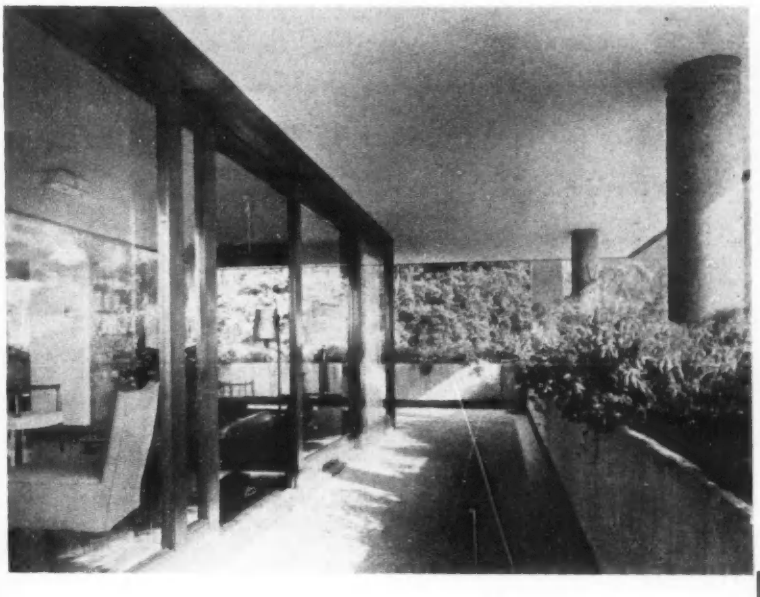


PASSENGER SHELTER AND CANTEEN, MANCHESTER

This bus shelter has been erected on an extended pedestrian island forming part of a new gyratory traffic system introduced at Piccadilly, which is one of the principal city termini. The shelter is 577 ft. long and 28 ft. wide; with a two-storey central block 63 ft. long × 17 ft. high containing a transport staff canteen and toilets on the first floor, the ground level being free for public circulation.

The structure consists of reinforced concrete slabs 4 in. thick supported on 4 in. × 4 in. aluminium columns. The two-storey portion has a 21 ft. radius reinforced concrete shell barrel roof 2½ in. thick. The panels between the columns are purpose made aluminium section windows glazed with ¼ in. armourplate glass; the kicking panel at the base is a composite blue and yellow vitreous enamelled steel sheet bonded to a core of asbestos and with a heavily stippled aluminium sheet internally. The staff building is in the centre of the shelter and at first floor level, supported on 8 in. × 4 in. aluminium columns allowing public circulation space below with a ceiling height of 8 ft. 6 in. A small inquiry office has been provided within this central area and is constructed in a similar manner to the rest of the shelter.

The shelter was designed by the City Architect, Mr. Leonard C. Howitt, MArch, DipTP, FRIBA, MTPI, and the general contractors were Robert Carlyle & Co., Ltd.



APARTMENTS in Bogota, Colombia

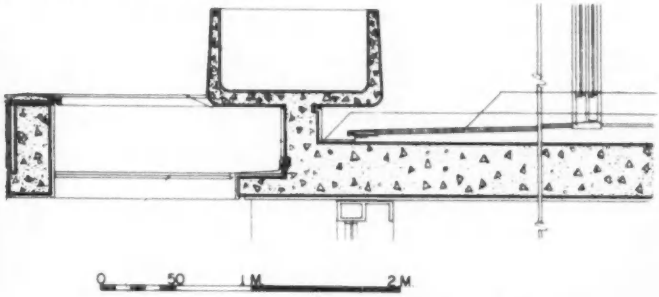
Architect:
GUILLERMO BERMÚDEZ

Engineer:
FERNADO MURTRA

The private terrace on the fifth floor showing the large concrete plant trough which forms the balustrade

The front elevation of the maisonette wing showing the entrance canopy

SECTION OF THE FIFTH FLOOR TERRACE



THIS block of apartments is built on a site that slopes from front to back and this slope has been used to provide garage space under a mezzanine floor. The garage is approached from the rear of the block and the semi-basement also contains tenants' stores, an electric sub-station, quarters for the porter, etc.

The left wing of the block contains maisonettes which are reached from access balconies. The other wing contains flats and there is a centrally placed lift and staircase at the junction of the wings.

Wide, shaded terraces are provided for the maisonettes and the flats have individual balconies. The balustrades of the terraces are large concrete plant troughs and the balconies also have massive built-in window boxes. The bathrooms, which are internal, are artificially ventilated and each apartment contains an open fireplace.

The fifth floor terrace showing the step back, which forms a pergola, and one of the chimneys for the open fireplaces

The building from the south west. The foremen's and supervisors' entrance is on the left, beneath the clock

RESTAURANT at Llandarcy Oil Refinery, South Wales

Architects :
J. M. WILSON, H. C. MASON & Partners

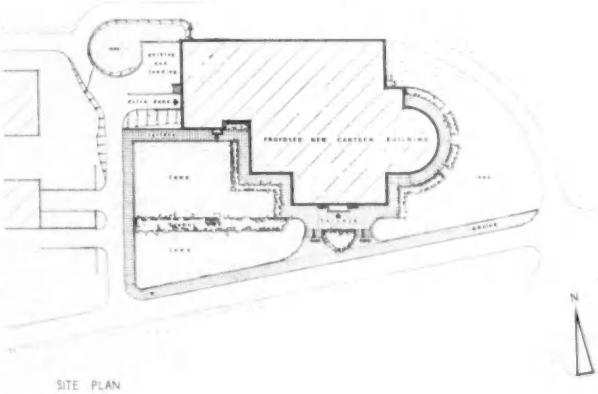
Quantity Surveyors :
W. T. HILL & Co.

General Contractors :
DEMOLITION & CONSTRUCTION Co., Ltd.

THIS restaurant is one of a number of buildings designed by the same architects for BP Refinery (Llandarcy), Ltd. The refinery occupies a fine site above the Neath Valley and the administrative and other buildings have been sited to make the most of the view.

The main restaurant illustrated here is intended to serve all the workmen, foremen and supervisors throughout the refinery. Two entrances are provided : the workmen's main entrance and a side entrance for foremen and supervisors who also have a separate dining room and servery.

The slope of the site enables the basement beneath the kitchens to be used for storerooms, a garage for the food vans and kitchen staff toilets, rest room, etc. A large service duct runs beneath the serveries and also under part



SITE PLAN

The building from the south east showing the apsidal end which is glazed from floor to ceiling

Looking east in the main dining hall towards the semi-circular window giving a view over the Neath Valley

Restaurant at Llandarcy Oil Refinery, South Wales

Looking west in the main dining hall. The mural on the end wall is by N. W. Griffith

The workmen's main entrance on the south elevation

of the dining rooms. Two loading and unloading platforms are provided; one adjacent to the bulk store in the basement and the other on the ground floor.

Although the main dining room only seats 500 at a sitting, the kitchen and kitchen quarters are designed and equipped to provide 2,000 meals daily as the four satellite restaurants throughout the works are supplied from this central source. Special provision has been made for the packing and loading of insulated food containers and the ground floor loading platform is used for this. Special equipment for sterilizing the empty containers is also provided adjacent to the loading platform.

The building has a steel frame with brick walling and stone and artificial stone dressings. Mechanical ventilation and plenum heating is used extensively in combination with hot water convector radiators.

The view obtainable from the main dining hall has been stressed by the floor-to-ceiling glazing of the apsidal east end. At the other end of this dining room is a mural by a student of the Royal Academy Schools, Mr. N. W. Griffith, which portrays the historical and cultural associations of the neighbourhood.

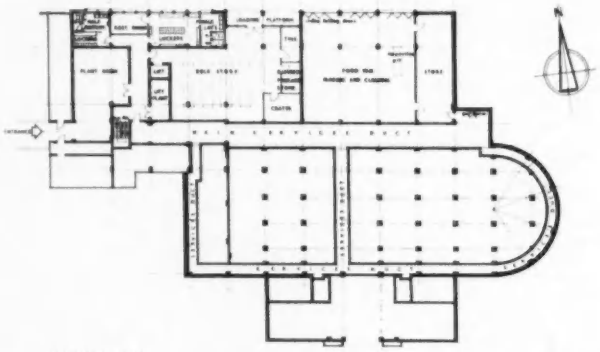
The ventilation, trunking and other services in the dining room are concealed behind a false ceiling, and this ceiling is lined with acoustic tiles and finished with a fibrous plaster surround. Heating panels are concealed between the heads of the openings for doors and service hatches and the clerestorey windows.

The general colour scheme is in shades of blue and yellow. The chromium plated tubular steel furniture is designed to conform with this and the floor is finished with pale buff tiles.

Considerable landscaping has been done around the building and much use has been made of stone retaining walls for the system of terraces. Window boxes are provided for the full length windows of the restaurant and there are flower beds adjacent to both the entrances.

GROUND FLOOR PLAN

Scale: 1 inch = 64 ft



BASEMENT PLAN

Restaurant at Llandarcy Oil Refinery, South Wales

Sub-contractors and Suppliers :

Engineering services, Matthew Hall & Co., Ltd. ; *electrical installation*, Hartley Installations, Ltd. ; *facing bricks*, Proctor & Lavender ; *structural steelwork*, Dawnays, Ltd., Swansea ; *metal windows and doors*, Crittall Manufacturing Co., Ltd. ; *artificial stone*, Empire Stone Co., Ltd. ; *pre-cast floor beams*, Concrete, Limited ; *wall and floor tiling*, Carter & Co., Leeds Fireclay Co., Ltd. ; *roof coverings*, Asphalte Specialists, Ltd., Ruberoid Co., Ltd. ; *lift*, Marryat & Scott, Ltd. ; *kitchen equipment*, Benham & Sons, Ltd., Eclipse Copper Co. of York, Ltd. ; *ironmongery*, Adrian Stokes, Ltd. ; *pay kiosk*, Samuel Elliott, Ltd.

News of the Week

County Hall Extension

THE London County Council has approved a scheme for the extension of the south block of County Hall at a cost of £395,300, which will provide accommodation for about 312 staff and a space for the reinstatement of a restaurant for J. Lyons and Co., Ltd. The opportunity afforded by the proposed building operations is being taken to include a scheme for improving the Belvedere-rd. courtyard to County Hall, providing, at a cost of £48,400, parking space for 100 more cars, better traffic circulation, a fountain in the centre facing the main entrance to County Hall and the complete reconstruction of the surface of the courtyard. The total estimated expenditure is expected to be spread over four years.

National Essay Competition

THE PRIZES and certificates of the National Essay Competition, 1958, organised by the Council for Visual Education, were presented to the successful competitors at the Building Centre, 26 Store-street, London, WC1, at 3 p.m. on April 22, by Sir Albert E. Richardson, KCVO, PPRA, FRIBA.

The subject of the Council's essay competition was 'My Ideal School, its Design and Decoration.' Entries were invited from boys and girls in the three age groups 10-12, 13-15 and 16-18, and although rather fewer essays were submitted than in 1957 it was stated that the general standard was higher as more teachers made their own selections and sent in only the best efforts. Schools in rural and urban areas of England, Wales and Scotland competed and, while a minority of the essays resembled a catalogue of classrooms and corridors, many showed maturity of thought and an insight into the many planning problems.

It has now been announced that the subject for the 1959 competition will be 'My Favourite Street.' The aim of the competition is to encourage boys and girls to use their eyes and imagination and to explain their ideas on the subject of the essay. The street should be an avenue, road, lane, square, or village green they know, in which are not less than twelve houses, shops or other buildings. Some of the buildings should be described and if competitors think the street could be improved, suggestions should be made as to how this could be done.

Essays and inquiries regarding the competition must be sent to Mr. W. A. Yerbury, Essay Competition Hon. Secretary, The Council for Visual Education, 13 Suffolk-street, London, SW1, not later than November 2, 1959.

Guildford Civic Hall Approved

SURREY PLANNING COMMITTEE have approved Guildford Borough Council's proposal to build a civic hall with ancillary rooms, bar, restaurant and caretaker's flat on land at the junction of London-road and Dene-road. The proposal affects a portion of The Firs car park and the implementation of the scheme will mean that some of the car parking space will have to be given up. To replace it a separate proposal to extend the car park at York-road was also agreed by the Committee.

The design, which was placed first in the architectural competition which was assessed in 1950, has been abandoned; plans for the new scheme have been prepared by Bridgwater and Shepheard, F/ARIBA.

Felix Candela Visit

SENOR FELIX CANDELA, the Mexican architect-engineer, is to lecture under the auspices of the Cement and Concrete Association at Friends' Meeting House, Euston-road, on Tuesday, May 5, at 6 p.m.

Teachers' College, Nottingham

A RESIDENTIAL TRAINING COLLEGE for teachers is to be built on a 34-acre site at Clifton, Nottingham, by the Corporation of Nottingham. It is being designed in the Department of the City Engineer and Surveyor, Mr. R. M. Finch, OBE, MICE, by the Chief Architect, Mr. J. R. Sketchley, ARIBA, AMTPI.

Professional Examinations

THE FACULTY of Architects and Surveyors will be holding professional examinations from June 1 to 5 (inclusive), in building and surveying. Applications must be received by the secretary not later than May 4. Further information is obtainable from the secretary of the Faculty at 68 Gloucester-place, W.1.

ASLIB Conference

A CONFERENCE on the presentation and interpretation of technical information has been arranged by ASLIB for Friday, May 8.

Speakers will include Lord Crook, who will introduce the proceedings, at 10.30 a.m., with a talk entitled 'The General Principles of Communications.' Other speakers include Mr. J. W. Godfrey, retiring editor of *Technical Instructions BBC*, Mr. A. B. Robertson, assistant editor of *The Times Review of Industry*, and Mr. H. R. Hockley, chairman, moderating committee of the City and Guilds Institute.

The conference will be held in the Connaught Rooms, Great Queen-st., WC2. Fee for the conference is 30s. (50s. for non-members).

Symposium Report

THE REPORT of the joint symposium on 'Consultants and Specialists,' organised by the Preston, Blackburn and District Society of Architects in co-operation with the Building Centre and the local branches of the RICS and the NFBTE, which was held at Alston Hall, Longridge, from December 5 to 7 last, has now been issued by the Society. The chair at the symposium (a report of which appeared in *The Builder* of December 12) was taken by Mr. R. Allport Williams, MBE, FRIBA, who besides being president acts as public relations officer to the Preston and Blackburn Society of Architects, and took a leading part in organising the symposium.

Wood Science Lecture

DR. E. GEORGE STERN, who is the E. B. Norris Research Professor of Wood Construction at the Virginia Polytechnic Institute, will be speaking to the Institute of Wood Science at 2.30 pm on Monday, April 27, at the Royal Society of Arts, 6 John Adam-st., WC2. The subject of his talk will be 'The Better Utilisation of Wood Through the Use of Improved Fasteners.' During the lecture Dr. Stern will be showing a film, 'House of a Lifetime.' The chairman will be Mr. P. O. Reece, director of the Timber Development Association.

Further details from Mr. F. G. May, Secretary, Institute of Wood Science, 21 College-hill, EC4.

10th Annual Building Conference

'CURRENT TRENDS IN BUILDING' is to be the theme of the 10th annual Regional Building Conference, being held on June 13 at Bournemouth Municipal College, and which is being organised by the Southern Regional Council for Further Education. The morning session deals with 'Current Trends in the Organisation of the Industry'; the afternoon session with 'The Changed Pattern of Craft Education.' Also at Bournemouth on the same day, the 5th Annual Regional Building Crafts Competitions for apprentices attending technical colleges in the Southern Region will be organised in the following crafts: brickwork, carpentry and joinery, painting and decorating, plastering and plumbing.

LCC Roehampton Housing

THE PREPARATION of the bills of quantities for the work on the LCC housing scheme at Roehampton, illustrated in our issue of January 23, was undertaken by Messrs. Wakeman, Trower and Partners, 47, Bloomsbury-square, WC1, the LCC's own quantity surveying department being responsible for the final account.

BRITISH EXHIBITION FOR NEW YORK

FBI Venture Announced

SIR NORMAN KIPPING, Director-General, Federation of British Industries, and Mr. W. P. N. Edwards, a director of FBI, have gone to the United States to make preliminary arrangements for the British Exhibition which will open in the Coliseum Building, New York, on June 10, 1960.

Britain plans to put on the most striking demonstration of advances in British science, technology and engineering ever to have been staged in the New World. This will be combined with an imaginative display of Britain's most famous top quality consumer goods. The exhibition, which will last for two weeks, is expected to be the largest ever staged by one country within the confines of another.

This exhibition, which will last for two weeks, is being organised by the FBI through its exhibition company, British Overseas Fairs, Ltd., and has the full backing of HM Government, the Dollar Exports Council and the British-American Chamber of Commerce in New York.

Many of the ideas embodied in the British Pavilions at the Brussels World Exhibition last year will be applied in New York, but a fresh and distinctive approach will be made to American buyers and public.

The name of the architect who is to design the exhibition has not yet been announced.

PROFESSIONAL ANNOUNCEMENTS

MR. PETER H. F. STILES, FRIBA, has relinquished his partnership in the firm of MESSRS. RAMSEY, MURRAY, WHITE AND WARD; this has been by mutual consent and, in future, he will practise independently at 9 Devereux-court, Strand, WC2.

MR. C. D. ANDREWS, FRIBA, will be retiring on April 30, 1959, from the post of regional architect to the North West Metropolitan Regional Hospital Board. He will be joining the firm of TOOLEY AND FOSTER, chartered architects, Midland Bank Chambers, Buckhurst Hill, Essex (Tel.: BUC 2211) as hospital consultant. MR. F. A. C. MAUNDER, RS, Dip.Arch, FRIBA, MTPI, has been appointed regional architect to the board as from the date of Mr. Andrews' retirement.

The following members of the firm of W. V. ZIM, consulting engineers, have now become associates: MR. R. SIMONS, AMIStructE, MR. A. P. MACDONALD, BSc, AMICE, MIStructE, MR. N. T. DEAKIN, BScTech, AMIStructE.

MR. W. D. KEY, FRIBA, FRICS, and MR. J. M. WEBB, FIAS, FRGS, announce that MR. D. I. BROWNING, ARICS, has been taken into partnership, and that the practice will continue under the name of J. A. STORY & PARTNERS, land and engineering surveyors, at 36 Hall-lane, Upminster, Essex.

MR. B. N. H. ORPHOOT, RSA, FRIBA, previously in practice in Edinburgh and Bideford, Devon, has now retired from active practice as an architect.

COMING EVENTS

MONDAY, APRIL 27

INSTITUTE OF WOOD SCIENCE.—'The Better Utilisation of Wood Through the Use of Improved Fasteners.' By Dr. E. G. Stern, Royal Society of Arts, 6 John Adam-st., WC2. 2.30 p.m.

RIBA. — 100th Library Group meeting. 'Wren's Drawings for St. Paul's: A Re-Assessment.' By Sir John Summerson. 66 Portland-pl., W1. 6 p.m.

ECCLESIOLOGICAL SOCIETY.—'The Mosaics of Ravenna' (Part 1). By Mr. E. A. Remnant, FRIBA, FRICS. 2 Bloomsbury-sq., WC1. 6.15 p.m.

TUESDAY, APRIL 28

ROYAL SOCIETY OF ARTS.—Exhibition of winning and commended designs submitted in the 1958 Industrial Art Bursaries competition. Opening by Sir Harry Pilkington on Monday, April 27, at 4.30 p.m. Monday-Friday: 10 a.m. to 5.30 p.m. Saturday: 10-12.30 p.m. (until May 15).

COMBUSTION ENGINEERING ASSOCIATION (Western Region).—Brains Trust: 'The Working of the Clean Air Act.' Seabank Hotel, Porthcawl, Glam. 10.30 a.m.

INSTITUTION OF CIVIL ENGINEERS.—'Extension of Nigerian Railway in Bornu Province.' By Sir Ralph Emerson. Great George-st., SW1. 5.30 p.m.

INSTITUTE OF BUILDERS, MAIDSTONE AND DISTRICT CENTRE (Licentiate Discussion Club)—'Insulation of Buildings.' By Mr. Lawrie. Town Hall, Maidstone. 7.30 p.m.

WEDNESDAY, APRIL 29

TOWN AND COUNTRY PLANNING ASSOCIATION. —Holiday-study tour of Austria (until May 20).

LONDON REGIONAL COUNCIL OF BUILDERS' FOREMEN AND CLERKS OF WORKS.—Films and discussion on 'Stressed Concrete Practice.' Henry Jarvis Hall, 66 Portland-pl., W1. 6.30 p.m.

ARCHITECTURAL ASSOCIATION. — 'Some Current Problems of the Building Industry.' Speakers: Mr. H. S. Oddie, Mr. D. E. Woodbine Parish and Mr. P. E. Trench. 36 Bedford-sq., WC1. 8 p.m. (preceded by dinner at 7 p.m.)

THURSDAY, APRIL 30

COMBUSTION ENGINEERING ASSOCIATION (Southern Region).—'Economic Purchase of Coal for Small Plants.' By Dr. G. Armstrong. St. Ermins Hotel, Westminster. 10.30 a.m.

FRIDAY, MAY 1

INSTITUTION OF STRUCTURAL ENGINEERS (Wales and Monmouthshire Branch).—Jubilee dinner and dance. Colwyn Bay Hotel.

MANCHESTER BUILDING FORUM.—'Symposium One, Towards Management.' Old Town Hall, Buxton (continuing until May 3).

LMBA.—Luncheon to meet Lord Mayor of London. Savoy Hotel, WC2. 1 p.m.

SOUTH-EAST ESSEX TECHNICAL COLLEGE & SCHOOL OF ART.—Prize distribution of the architecture, building and surveying department. Longbridge-rd., Dagenham. 7 p.m.

SATURDAY, MAY 2

PLANNING FORUM.—Day-tour to Crawley New Town. Aslon-pl., W1. 9 a.m.

A HUNDRED YEARS AGO

From THE BUILDER *of April* 23, 1859

CAUTION TO CARPENTERS AND JOINERS. —On Monday morning a man, representing himself to be a foreman in the employ of the Telegraph Company, engaged two joiners to go to Hatford to do some work for the above-named company. The engagement took place at the Artillery Arms, Rochester-row, Westminster, which is a house of call for carpenters and joiners. The men, with their tools, accompanied the man to Charing Cross; at his suggestion they left their tools at the Silver Cross, and went to a timber-yard to select some timber; at the yard he left them on pretence of getting some breakfast; after waiting some time they returned to Silver Cross and found their tools had been taken away by the man, and no clue to either the tools or the man has since been obtained.—A. B.

PRODUCTIVITY AND PRICES

'The Builder' Quarterly Analysis of Trends

Specially prepared for 'The Builder' by Professor C. F. Carter, Professor of Applied Economics, the Queen's University, Belfast, and a former member of the Girdwood Committee on the Cost of Housing, from statistics kindly supplied by the Ministry of Works (Statistical branch).

IN the fourth quarter of 1958 volume of building output recovered to the 'pre-depression' level of 1956, due to increases (over the third quarter) of around 3 per cent in 'new non-housing work' and in repair and maintenance, and to a small increase in housing work for private developers. In the 'new non-housing work' the most vigorous increase was shown by non-industrial work for private developers. The volume of output for once rose more than the value—in other words, the costs of building showed a small fall in the latter part of last year.

The rise in the volume of output must now be regarded as well-confirmed, and since the number of workers employed has been running about 10,000 lower than a year ago, the evidence for a rise in productivity is strong. On the housing side, the labour force has fallen much more than output; for other new work, the labour force appears to have risen less than output.

As suggested last quarter, the index of net output per man-month at constant prices (which is a possible measure of productivity) stayed constant through a period of falling output, and resumed its rise quite strongly when output started to go up again. This is an 'average' result for all parts of a very large and mixed industry; it is broadly true for new housing work, considered by itself, but the facts for non-housing work are less clear.

In this sector the measure of productivity was constant or slightly declining over two years of fluctuating output with uncertain trend; it appears to have risen sharply with the arrival of a period of regularly increasing output.

The chances of at least maintaining the higher level of output begin to look quite good. Orders for local authority housing received a short-term stimulus at the end of last year; the measures intended to assist building societies to make loans on older houses will probably in fact release more funds to support new building; despite the amount of idle capacity, new investment by industry continues at quite a high level; while the latest forecast for public investment in 1959 (much of which will make calls on the building and civil engineering trades) is unexpectedly high. It may indeed turn out that we are at the beginning of a sizeable boom for the industry, stimulated by cheap credit and by heavy State invest-

TABLE A.—OUTPUT OF THE BUILDING AND CIVIL ENGINEERING INDUSTRY IN GREAT BRITAIN (excluding direct work of Public Authorities)

	Actual value of gross output	Values at 1955 average prices			Indices, 1955 (average)—100 (constant prices)		
		Gross output	Net output	Input of materials	Gross output	Materials input per man-month	Net output per man-month
	£mn.	£mn.	£mn.	£mn.			
TABLE 1.—*New housing work*							
1956*	142	135	60	75	99	105	103
1957 I ...	140	134	60	74	98	110	109
II ...	144	136	60	76	99	113	110
III ...	134	125	58	67	91	103	108
IV ...	135	126	56	70	92	111	109
1958 I ...	125	117	52	65	85	111	108
II ...	132	122	53	69	89	117	110
III ...	131	122	54	68	89	113	111
VI ...	**130**	**123**	**54**	**69**	**90**	**119**	**114**
TABLE 2.—*New non-housing work*							
1956*	192	184	87	97	119	106	107
1957 I ...	197	186	90	96	120	104	108
II ...	211	195	91	104	126	109	108
III ...	211	191	92	99	123	103	108
IV ...	215	194	91	103	125	108	108
1958 I ...	210	190	90	100	122	106	107
II ...	221	**196**	92	**104**	127	108	107
III ...	228	202	94	108	130	111	**108**
IV ...	**228**	**206**	**95**	**111**	**133**	**115**	**111**
TABLE 3.—*Repair and maintenance work*							
1956*	100	93	63	30	101	107	101
1957 I ...	99	90	62	28	99	106	101
II ...	101	89	62	27	98	104	100
III ...	102	91	63	28	99	103	100
IV ...	101	89	61	28	98	106	100
1958 I ...	**99**	89	60	29	97	110	101
II ...	**104**	90	62	28	98	**104**	100
III ...	105	90	63	27	99	101	100
IV ...	**107**	**94**	**64**	**30**	**102**	**110**	**101**
TABLE 4.—*All building and civil engineering work*							
1956*	434	412	211	201	107	107	104
1957 I ...	436	410	212	198	107	107	106
II ...	456	420	213	207	109	111	106
III ...	447	407	213	194	106	104	106
IV ...	451	409	208	201	107	110	106
1958 I ...	**434**	396	202	194	103	109	106
II ...	**457**	**408**	207	**201**	106	**110**	106
III ...	464	414	211	203	108	110	107
IV ...	**465**	**423**	**213**	**210**	**110**	**115**	**109**

TABLE B.—PRICE COMPARISON

Index numbers (1955 First Quarter—100) of the prices of :

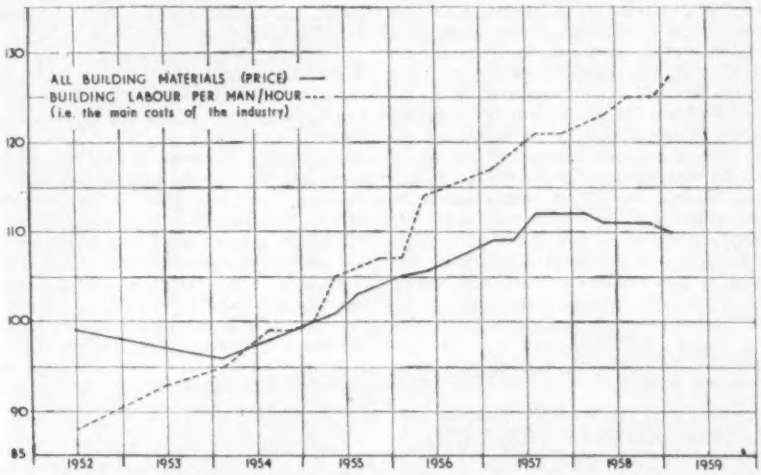
	All building materials	Materials for housing	Building labour per man-hour	Output price indices : All building	Housing work	New non-housing work	Manufactures 'wholesale' price index	Retail prices
1953*...	97	96	93	97	97	97	98	96
1954*...	97	97	97	97	97	98	98	98
1955*...	102	102	104	103	103	103	102	102
1956 I	105	106	107	106	106	105	105	106
II	106	106	114	108	108	106	106	108
III	107	107	115	109	108	107	107	107
IV	108	107	116	110	108	108	107	108
1957 I	109	108	117	110	108	109	108	110
II	109	108	119	111	108	111	109	110
III	112	110	121	113	110	113	111	112
IV	112	110	121	114	111	114	111	113
1958 I	112	109	122	114	111	114	111	113
II	111	109	123	114	110	114	111	115
III	111	108	125	114	110	**115**	111	114
IV	111	108	125	**114**	109	**114**	111	115
1959 I†	**110**	**107**	**127**	**114**	**109**	**114**	**111**	**116**

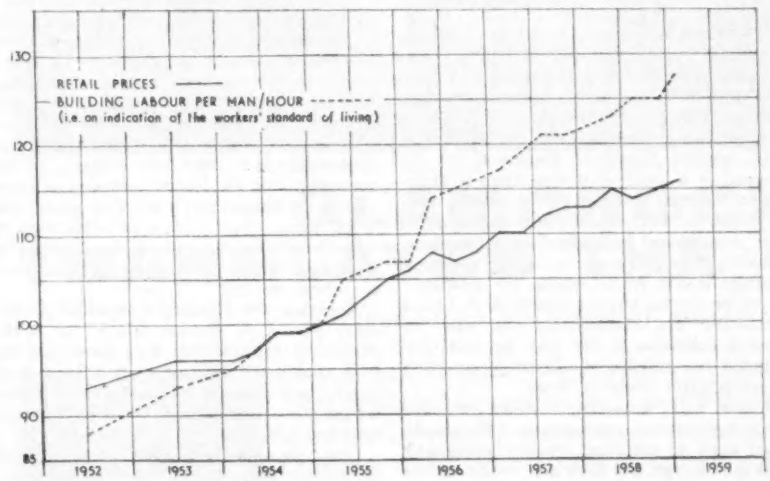
* Quarterly average. † Not Ministry of Works estimates.

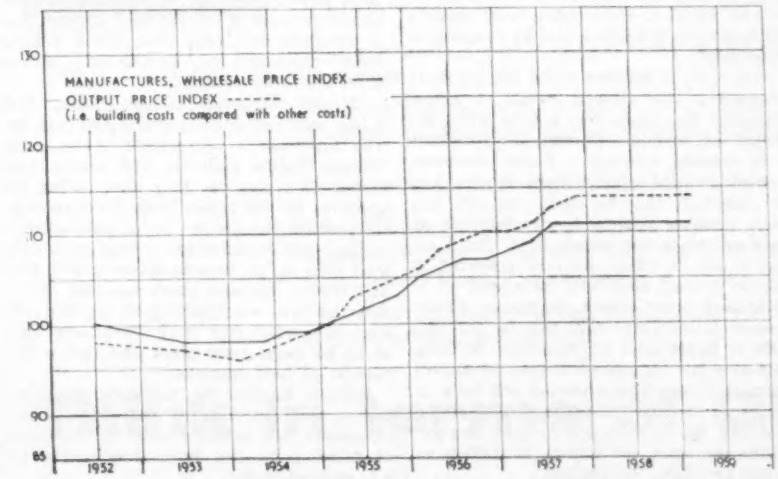
In both tables figures in **bold type** have been changed or added since last quarter.

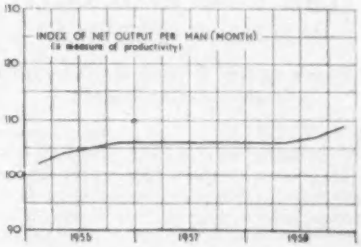
ment. The figures for 'new orders obtained' will be of particular interest over the next few months.

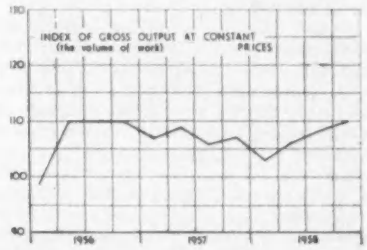
The prices of building materials fell slightly at the turn of the year, instead of rising (as was thought possible in the last article of this series). The cost of building labour per man-hour rose at the beginning of February. Since the last major increase in wages, in 1956, the real standard of living of building workers appears to have improved a little, but it is of course possible for the unions to argue that the workers have had no considerable share of the fruits of higher productivity. No doubt this argument will be closely examined in the final judgment on the workers' present claim for a substantial increase; and it may be a matter of some importance whether the recent increase in 'net output per man-month' is regarded as evidence of a definite trend in productivity, or as a mere fluctuation of no necessary permanent significance.











In consequence of the opposing trends of wage and material costs, I have shown the output price indices as unchanged for the first quarter of 1959. Since the weather cannot have been a serious adverse influence in the latter part of the recent winter, it is possible that productivity will have increased further, and that output prices will in fact have fallen a little.

Table B shows that average output prices for British manufactures have been stable since the middle of 1957, but that retail prices have edged up into new high ground. The tendency of retail prices to rise, however, has been related to increases for food (e.g. meat) and for housing; the index for clothing has recently fallen back to the 1957 level, while that for durable household goods is below the 1956 level. It is possible that, with the fortunes of the season, food prices may fall back; and the increases for housing are clearly related to the Rent Act. There might, therefore, be at last a period of stability in retail prices.

But an election cannot be long delayed, and it might bring large changes in Government economic policy; the uncertainties of international affairs may have an effect on commodity prices; and the slowing down of inflation has owed as much to temporary good luck as to good management. I will not, therefore, tempt Providence by predicting stability for far ahead; even a few months of rising prosperity with stable prices will be a relief after the long post-war inflation.

'THE COMPREHENSIVE BUILDING SERVICE'

A Paper at the British Architectural Students' Conference

A PAPER on 'The Comprehensive Building Service' was given by MR. A. H. ANDERSON, a builder, at the British Architectural Students' Association Conference, which was held at Trinity College, Cambridge, on April 5. The speaker began by defining the difference between this type of service and the All-in Servce. Mr. Anderson said:—

In the case of the All-in Service, the builder deals direct with the client, and provides him with a building without reference to an independent architect. The builder will either employ an outside architect, or he may have his own architectural staff, but whichever be the case the builder in fact controls the architect. The reverse is so with the Comprehensive Service. The architect is appointed by the client and he in turn appoints the builder for a project. In other words, the architect is in control and the builder provides him with the building service.

You will note that both these services pre-suppose a negotiated single-tender contract. I am quite sure that most of you here will agree that, given a building organisation in which you have confidence and good quantity surveyors, the most satisfactory contract on all scores is the negotiated contract. There is no doubt in my mind that, in that way, the client will almost always receive a more satisfactory job at a more reasonable price.

We ourselves have found that the closer the architect/builder co-operation, which, of course, pre-supposes a negotiated contract, the lower the final price of the whole project. You may say that where a system is employed, real, or rather fair, tender competition is not possible, and that so far as the superstructure is concerned a negotiated tender is the only sensible way. That is correct, but our experience shows that the advantages of close architect/builder co-operation are not confined to the proprietary portion of a project, but apply also to all the normal builder's work.

If I am correct in my contention that the closer the architect/builder co-operation the more economical the structure, herein surely lies a future danger to your profession. Short of the acceptance of a Comprehensive Building Service, the only complete co-operation between architect and builder lies in the All-in Service. Is it not possible, then, that in due course the All-in Service may prove to be the most economical way of obtaining a building? The logical outcome could be that the client will decide that it is an expensive luxury to appoint an independent architect.

How then is the architect going to retain his professional independence and his artistic integrity? How also is he going to earn his living unless he climbs onto what could become the All-in Service band waggon? To me the solution is clear, but then perhaps I am biased. In my view, he can not only retain but also enhance both his status and his integrity, provided he is prepared to have faith and confidence in the builders of his choice and himself give an All-in Service to the client.

The architect must, in my view, become a much more active and, may I say, aggressive leader of the building team, and must be prepared to sell himself and his building service to the building owner. This service would consist of the design of a building, which will have been carried out with the practical collaboration of the builder of his choice (that is, a Comprehensive Building Service), and the tender for the whole project which, with the assistance of quantity surveyors, he will have negotiated with the same builders. I see a firm of architects having at call a number of building firms in whom it has confidence, each of whom may be more suitable for one type of project than another, but all of whom would be able to give a Comprehensive Service. No doubt you will all be thinking of many snags in this idea. Of course there are snags, but I firmly believe that the principle is correct and worthy of serious consideration.

Finally, I put it to you that what I have said suggests that there is a real case for the architect to become in effect once more the Master Builder.

PROPRIETARY BUILDING SYSTEMS

Protest from Local Firms

BRIDGNORTH TOWN COUNCIL at a meeting on April 14, decided that in letting future housing contracts the Council will give local building firms the same facilities for submitting contracts as are at present available to proprietary building firms. The decision was reached following discussion by the council of a letter of protest from a Bridgnorth building company, S. A. Lowe Ltd., of which Mr. J. D. Bloore is managing director. Mr. Bloore had complained that local builders were not given a chance and were having to find work outside the district.

At the council meeting COUN. G. A. LUCAS welcomed the decision, saying that on several occasions in the past he had condemned the practice of allocating contracts to proprietary building firms.

COUN. J. T. FOULKES, however, felt that the complaint was not justified. 'We should have liked to see local builders competing a long time ago, but they did not do so,' he said. By permitting local builders to tender for contracts, said COUN. I. J. MORGAN, the council would be encouraging local industry and helping to promote a healthy competitive atmosphere.

ALD. J. W. C. BOWERS stated that the older members of the council would no doubt remember that there was a time when the council was unable to interest local builders in its housing schemes. 'I can remember in 1946 or 1947 when a local builder told me personally that he could not care less about building council houses because he could not make any money at it. But I am glad to see that they are now prepared to take on council contracts,' he added.

Replying to the debate, the Mayor, COUN. HAROLD BLACKWELL, said that in the late 1940s it might well be that local building firms were not big enough to take on council contracts. 'Any firm tendering will have to give us an assurance that they have got the tools and the men to get on with the job because we want our houses as quickly as we can get them,' he warned.

NEGOTIATED TENDERS

Midlands Criticism

THE letting of contracts on the basis of negotiation was strongly criticised at a meeting of the Shrewsbury Town Council last week by COUNCILLOR JOHN BURKE. He said it was bad in principle and bad business for the town.

The Council approved a tender from Shutt & Co. Ltd., of Wolverhampton—the lowest received—for the building of 113 houses and 13 garages on the new Harlescott Grange Estate at a price of £140,137. Fees and other charges bring the total to £144,900. At the same time the Housing Committee asked for approval for a negotiated tender from Messrs. Wimpeys for building another 28 garages on land at Moston-road, Harlescott. The contract figure for these is £3,454, which is brought to a total of £3,570 by various fees and other costs.

COUNCILLOR BURKE said that, having read the paragraph about the building of the garages on the Meadows Estate, he was beginning to wonder whether the Council's Standing Orders over contracts were worth the paper they were printed on.

The Council were now frequently seeing contracts involving large sums being 'handed over on a plate' to contractors.

Here was a competitive tender (from Shutts) for the building of 113 houses and 13 garages at a price of about £140,000 whereas in January the Council had agreed to let another contractor build 115 houses and eight garages at a price of £159,000 without a competitive tender being asked for.

Councillor Burke said he appreciated that there might have been some urgency; in this particular case the Ministry wanted to know details of Shrewsbury's housing plans, but while there might not have been time to advertise for tenders, the Council might at least have invited a number of private firms to submit tenders.

Replying, the Housing Committee Chairman, ALD. T. G. RYDER, said as far as the garages at Moston-road were concerned the firm concerned (Wimpeys) had built flats nearby; when the Council had gone to tender for garages at the rear of the shops the same firm had submitted the lowest tender.

Later the shopkeepers gave their gardens for further garages and the Housing Committee took advantage of the situation to build another 28. As the first contract was almost finished the Committee decided that as the firm's first competitive tender was the lowest submitted, they should carry on and build the other garages.

On the Harlescott Grange Estate, Ald. Ryder went on, three contracts had been let. The first was a competitive tender from Towers, Wilson and Co.—the lowest submitted—and that day they were asking for approval for the tender from Shutt and Co. Ltd., which was also the lowest submitted.

The other contract was a fixed price contract with M. A. Boswell (Contractors), Ltd. The reason this was given was that at the time this firm was finishing off another contract in another part of the town and were about to move their plant and reduce the number of men employed.

Because the price they submitted was competitive and satisfactory, and the Housing Committee was satisfied with the standards of building by this firm, they agreed to a negotiated tender.

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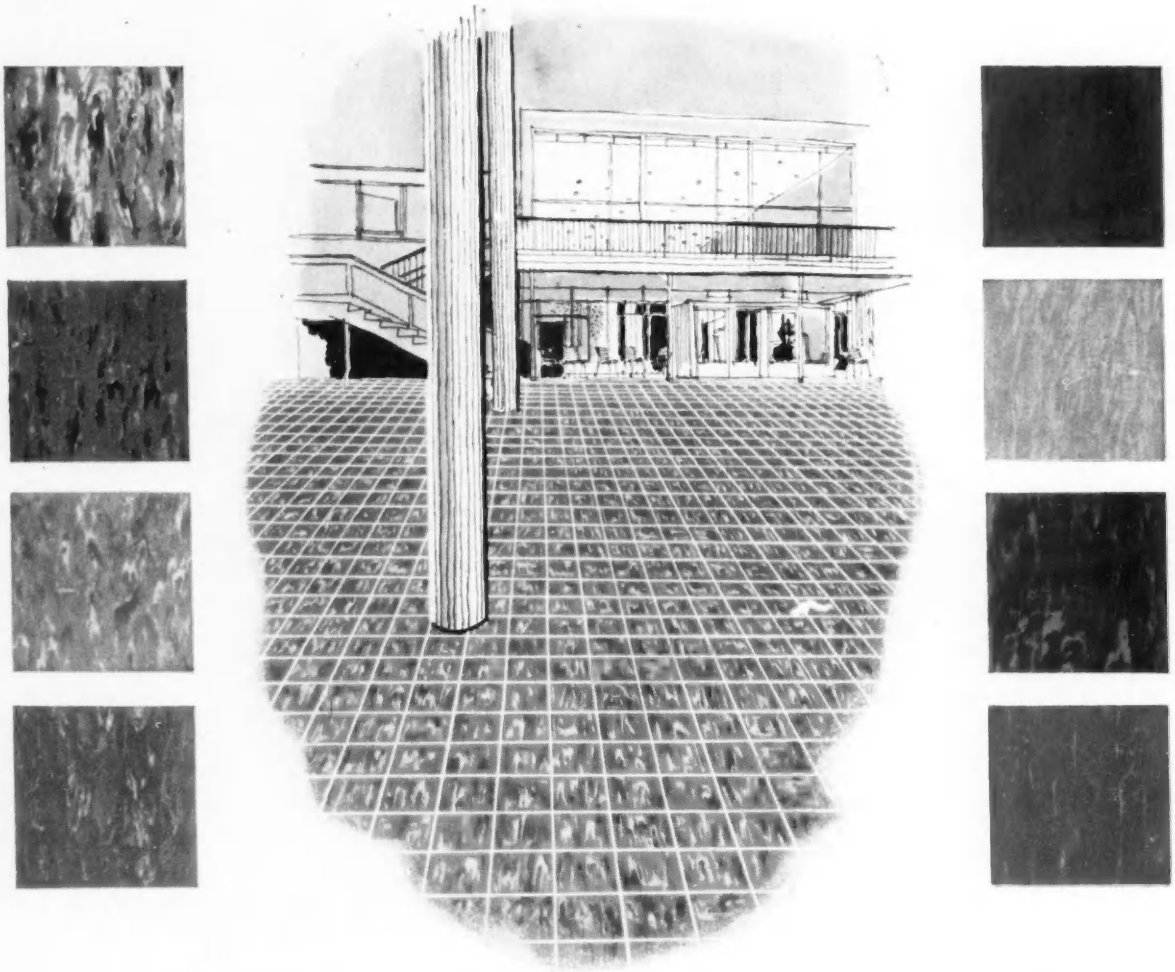

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EVERYDAY THINGS

By Arthur W. Kenyon, CBE, FRIBA

LXXVII.—Wear and Tear

HOW many of those who possess motor-cars see that the oil is changed, that the tyres are kept up to pressure, that the paintwork is washed, that the chromium plate is cleaned, and when they go out at night check the lights? The answer is, of course, we all do these things, for a motor-car costs a lot of money and it depreciates very quickly and would depreciate even more quickly if these things were not done.

You will be told that you cannot compare a motor-car with a building because there are so many grades of motor-cars ranging from the super models where everything is tested to destruction point to the cheapest models which are not so good in quality. The higher the grade of machine, the less maintenance it requires: it cannot be neglected altogether, but the parts last longer; and it will be said that buildings are not like this. I wonder!

The owner-occupier of a building is conscious of the fact that any wear and tear is his responsibility, and he must budget for this in his depreciation arrangements, so that the better he maintains it the longer is its expectation of life and its present value.

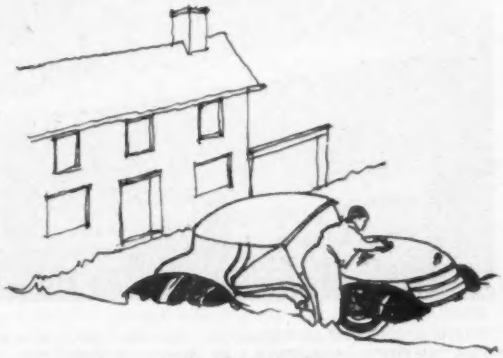
When we have our windows cleaned, do we get the window cleaner to wash the paint at the same time? No. If we did, would it last longer? Yes. How often do we oil our locks? Never—at least not until they stick and give trouble, and if we look inside them we shall probably find them red with rust. The point is, do we take the same care of our property that we do of our motor-car, and the answer again is No.

I agree that it may not seem so easy to look after an inert mass of structure as it is to look after a more intimate possession like a car. I therefore plead for better finish in our buildings. If we had maintenance and upkeep constantly in our minds when we are carrying out work we should aim at a much higher standard of finish than is generally adopted.

We could all name buildings which have had care and attention in their construction and finish, and what a joy and pleasure it is to see materials of lasting quality. I have known paintwork last for years without a blemish; and I have also had builders say to me 'That is my standard of finish for housing,' meaning that they have variable standards and housing is not of the highest.

More and more is it true that you get what you pay for and, although building costs appear to be high, from my own observation I do not think we are achieving the standard which will avoid high maintenance costs. Should we therefore assume that it is intended that the buildings which we are putting up to-day are to have a shorter life and that we are to accept a lower standard of finish and higher maintenance costs as the price of less outlay on the capital cost, or are we to fight for better standards at whatever the cost?

If we are to have different grades of building, as we have of motor-cars, then at least it should be made plain to owners at the start exactly what standard they can expect for their money.



Caring for the Car

HIGH DENSITY HOUSING

Housing Centre Talk

GIVING HIS VIEWS on the objects to have in mind when planning high-density housing, MR. PETER H. C. CHAMBERLIN, ARIBA, in a talk given recently at the Housing Centre, Suffolk-street, said it was most important that there should be no unconsidered left-over spaces. It should be remembered the whole time that one was providing for people who were not only different from each other but constantly changing; also that hygienic standards were not enough—a good environment for the people living in high-density housing was much more important.

It was the environment of the people rather than the buildings themselves that made living in towns tolerable or otherwise. Referring to Dolphin-square as a 'dreadful form of high-density housing,' Mr. Chamberlin drew attention to the fact that, although the density there was well up to 300 per acre, the demand for the flats was not falling off, in spite of the fact that the flats were no longer cheap. On the other side of the picture were such dwellings as Peabody Buildings, which were generally regarded as undesirable.

The obvious answer was that poverty came into the matter. If people were well enough off they could either afford better dwellings or a better environment.

If the actual needs of human beings in regard to housing of any sort were analysed it was realised that certain standards had come to be accepted. The first thing anyone required, wherever they lived, was sanitation, next came a room of some sort. You could not live close to other people without wanting privacy at some time.

Other desirable qualities were light and air. Once we really got clean air in our cities the revulsion of people to living in them would gradually diminish. Another thing people required in their housing was quiet. Probably the noise factor had increased more during the last century than at any other time. Then there was warmth and all the services necessary to provide it.

Contact with others was another necessity and it was imperative that people have access to their families and to accomplish this it was essential to have dwellings of the right size. One could almost imagine the environment people needed as a series of rooms of sorts, such as the workroom (factory), office room, schoolroom, shopping room and so on. All these activities needed space.

But the danger of pursuing this sort of analysis of the standards which were absolutely necessary for people was that you tended to be led into a sort of hygienic classification where people were filed away in particular categories, i.e., young, old, male, female, at school or not and so on. Very often this was expressed in terms of zoning and one's search for order might result in people being ordered instead of provided for.

Asking the question, 'What is the quality one is looking for?' Mr. Chamberlin showed coloured slides of scenes in Britain and abroad to illustrate his points. He then proceeded to describe the Golden-lane, City development (in the design of which he was concerned) and the Barbican project.

He did not regard Golden-lane as a model scheme, but it was one with which he was familiar. It was not just housing for one type of person. There were families, couples, single people and elderly people all on the site. He described the provision made there for recreation. It was possible for people of all ages to take some form of physical exercise. There were also 20 shops and a public house.

Human Scale

Mr. Chamberlin drew attention to the variety in the shape and size of the buildings, the 'very human scale' of the internal courts, the underground service road (no traffic is allowed on the site above ground level, except at two points) and the fact that the whole of the seven acres was a precinct reserved for pedestrians.

If we could keep down the traffic and create within our towns precincts where the pedestrian was free to move about and the noise and smell of the motor car were largely kept outside, then we would be half-way to making high-density environment tolerable.

As for internal planning of the dwellings, the speaker said that in the two-bedroom maisonette, for example, the living room must be large enough for people to gather in.

Mr. Chamberlin went on to advocate making more use of flat roofs which usually occupied as much lateral space as the building itself. The treatment of all surfaces, including the space on the ground between the buildings, was also important.

In the design of the Barbican scheme, he said they had tried to provide real variety by designing dwellings ranging from 4 to 25 storeys in height. Again, an attempt had been made to exclude all motor vehicles. Below the site was a honeycomb of service roads and car parks.

In the second stage it was proposed to have a central garden with eight-storey flats surrounding it.

LAMPS AND ILLUMINATION

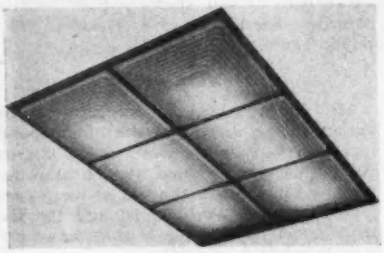
By a Lighting Engineer

ADOPTING the theme of light in honour of the Golden Jubilee of the Illuminating Engineering Society, this year's Electrical Engineers' Exhibition will long be remembered for its emphasis on applied illumination.

Production of new lamps and controlling equipment, and the development of novel lighting techniques are a clear indication of continuing progress in an active and virile industry. Healthy competition among the many specialist exhibitors is now resulting in 'value for money' products, the quality of performance of which are of an exceptionally high standard.

Integrated luminous elements feature prominently in the ranges of the leading manufacturers, and architects and builders are rapidly accepting the æsthetic and financial advantages offered by these contemporary lighting systems. General lighting by means of fluorescent lamps arranged above large area diffusing panels, extending over the whole or part of the ceiling, can be satisfactorily achieved from a wide variety of proprietary products.

With so many alternatives available, choice of a diffusing material is no easy task. Plastic louvring or sheeting varying in size, texture, colour, patterning and finish is usually suggested since this eases the problems of support. Similarly wiring is simplified by mounting the fluorescent fittings on continuous trunking. An example of complementary functioning is the development of an aluminium alloy trunking which not only carries lighting and power cables, but is so shaped as to carry office structure partitions and false (solid or luminous) ceilings and lighting fittings.



'Brite-Glo' ceiling unit measuring 6 ft. by 4 ft. with type 'A' plastic diffusers. By Courtney, Pope (Electrical), Ltd., Amhurst Park Works, Tottenham, N15

One leading manufacturer is now marketing the 'Brite-Glo' ceiling which, produced primarily for the domestic market, can well be applied to offices and shops. Designed as a packaged ceiling unit, it consists of a patterned plastic diffuser (6 ft. by 4 ft.) suspended by chains from two, individually mounted, fluorescent channel battens. The floating luminous ceiling resulting can transform many existing interiors in which initial cost of a proper false ceiling is prohibitive.

Among the many other general purpose fluorescents offered by this firm are pelmet fittings which, when correctly positioned on the walls of a shop interior, will emphasise architectural features and merchandise and control customer flow.

A new variation in the ceiling treatment of large and lofty shop interiors is based on the use of elongated fluorescent diffusers and square boxes, linked by aluminium tubing and suspended from the main structural ceiling by ⅛ ins. rods. The square and long box fittings are assembled in the form of a grid; wiring is introduced into some of the boxes which act as distribution points, while others house tungsten lamps for 'spot-light' effects. Structural details or surface defects of an unfinished main ceiling will not be seen, if the void above the grid is painted black or dark blue. The sides of the boxes can be coloured or patterned to choice.

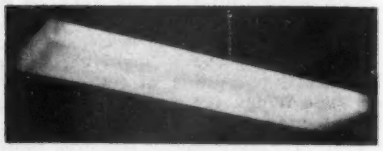
Higher Intensities Needed

Although the artificial illumination of modern commercial interiors has gradually increased in intensity over the years, in many instances still higher values would be economically advantageous. To prevent accompanying visual discomfort, however, glare must be avoided, and one enterprising firm, with an eye to future demands, is producing a novel range of 'Comfort in Lighting Fittings.' By the use of aluminium trough reflectors, containing specially designed stepped louvres, the light emission from fluorescent lamps is redirected in preferred directions. Thus by means of strict control of light cut-off angle and the use of specular reflectors, general illumination values of over 100 ft. cdls. are both possible and acceptable.

Absence of a false ceiling or lack of cavity depth restricts the adoption of recessed fluorescent fittings. To meet the demands of architects requiring a minimum of protuberance and the absence of visible metalwork, shallow depth units suitable for direct ceiling mounting have been designed. One series of square, rectangular and triangular 'Wafer' diffusers have an overall depth of 4 ins. The lamps and control gear are concealed by a one-piece, opal perspex cover, provided with spring clips for ease of installation and fixing.

Recognising the limitation of low ceilinged rooms, attention is being given to the design of decorative wall-mounted fluorescent fittings. Some are suitable for corner or ceiling beam fixing, and others can be fixed at a distance down from the ceiling.

The principle of basic component construction, now accepted by nearly all fittings manufacturers, has led to the design of a variety of commercial and decorative luminaires all of which can be assembled from a few standardised parts. This is of great advantage, particularly in the case of fluorescent units, since it simplifies the problems of storage and installation, keeps prices low and facilitates flexibility in service.



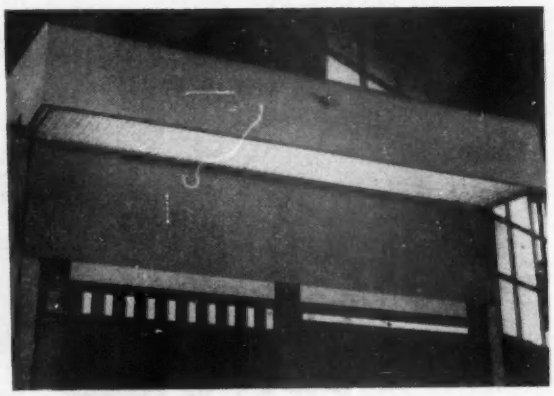
'Wafer' fluorescent fitting (No. GIQ/3040), by Atlas Lighting, Ltd., 105/9 Judd-street, WC1

Close attention is being paid to the mechanical aspects of design as simplification of fixing and maintenance will keep site labour cost down. A typical example of this is a proprietary range of 200 designs, covering 4 ft., 5 ft. and 8 ft. fluorescent lamps, all based on one universal section spine.

Fixing is a one-man job, because the heavy control gear is contained in a tray which is hooked on to a lightweight spine previously attached direct to the ceiling or supported from a chain or conduit. Ranges of this type are of supreme quality and performance, but many reputable manufacturers are producing simplified lines to meet the demand for lower initial costs.

Fluorescent lamps continue to be applied to the solution of special lighting problems and one useful application is a telephone switchboard unit. Designed for mounting on the top of the switchboard, the fitting houses two 20 watt fluorescent lamps for upward and downward lighting. A special louvre system eliminates glare and units may be joined to suit any length of board.

The production of miniature fluorescent lamps in 6 in. 4 watt, 9 in. 6 watt, 12 in. 8 watt and 21 in. 13 watt ratings opens up new possibilities of achieving better and cheaper local lighting. One



Fluorescent switchboard illuminator for the lighting of manual PBX telephone switchboard. By Siemens Edison Swan Ltd 38/39 Upper Thames-street, EC4

firm offers a small completely adjustable bench 'light' comprising a polished aluminium trough reflector (with twin arm support) housing two 8 watt ⅝ in. dia. fluorescent tubes. A clear or opal visor acts as a dust cover and the gear is mounted in the supporting case.

In addition to a large size, rating and colour range of straight fluorescent tubes, there are now three circular lamps of 8¼ in. dia. 22 watt, 12 in. dia. 32 watt and 16 in. dia. 40 watt rating. These can be supplied complete with diffuser fittings or they can be incorporated in custom built luminous elements.

Trends in display lighting were well illustrated by a series of fully-dressed shop windows, the illumination schemes of which were designed by leading firms in this field.

The general techniques, successfully followed in modern stores, comprise background lighting with fluorescent lamps and accent effects with high intensity tungsten lamps. Electronically controlled coloured fluorescent lighting and animated spotlights are interesting innovations worthy of consideration for large installations.

For very high lighting emphasis many firms now suggest low voltage spot lighting and a variety of suitable lamps, transformers and reflectors are now available. Adopting the principle of back reflection (as often employed in motor-car headlight design) narrow light beams, with a minimum of light scatter, are produced for accentuating the brightness, colour and shape of merchandise. As the lamps and equipment are small they can be easily concealed. Fire resistant colour filters can be added as and when desired.

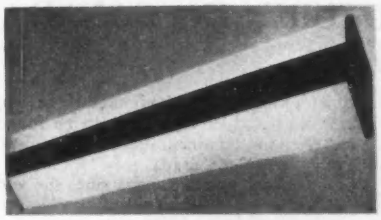
Colour and Freshness

Near perfect colour rendering combined with freshness and vitality of appearance can be provided by a combination of 125 watt mercury fluorescent and 200 watt tungsten filament lamps. Inspection of a scheme of this type, many of which have been installed in well-known shops and stores, clearly indicates that attractiveness and sparkle depends to a great degree on the right combination of high lighting and shadow.

Many store owners have yet to learn that to fit lamps in windows, without finesse and forethought, only causes excessive glare which in itself is distracting. A lighting effect, without an apparent cause, can always be achieved, however, if there is close and complete co-operation with the shop fitter and display artist.

The many extensive ranges of tungsten lamp display fittings now available will enable all lighting problems of this nature to be solved with the minimum of trouble and expense. Although general service lamps can be used in polished reflectors, the highest beam intensities are obtainable from internal reflector lamps. This fact can be established by referring to the technical data included in firms' catalogues.

It is now common practice to offer recessed display fittings which have standard flange rings and lamp housings, and alternative flush or protruding diffusers to meet the light distribution required. If



Fluorescent 'Linaire/5' fitting for wall mounting, by SLR Electric, Ltd., Welbeck Works, Welbeck-road, South Harrow, Middlesex

a number of spare diffusers is held by the user, modifications can be made in situ to suit changes in display. To eliminate all possibility of glare using a ceiling recessed 75 or 150 watt internally silvered lamp, there is a fitting which incorporates horizontal baffles. The depth required above the ceiling is 12¼ in. or 14 in. and the hole dia. necessary is 8¼ in.

Decorative glass and plastics coloured metal and perforated or pierced materials are incorporated in the many new designs of pendants and wall brackets introduced by specialist firms. The novel feature of a five light fabric shade pendant (satin brass metalwork with green leaf motif) is the inclusion of a white plastic disc which prevents direct view of the lamps.

Following an Italian trend in decorative design one or two firms are showing two-glass diffusing shades for use with tungsten filament lamps. An inner opal glass shade is surrounded by a coloured or decorative satin etched glass producing a pleasing double diffusion effect.

Two new surface mounting wall brackets with invisible metalwork, are of opal enamelled and satin finished moulded glass and can be used with a 40, 60 or 75 watt tungsten.

Among the many variations of table standards on display, the most novel was a conical shaped white opal glass stem with pleated fabric shade. A 100 watt lamp is used for normal lighting and a 15 watt lamp in the glass stem enhances its decorative nature.

'White' tungsten lamps of mushroom shape are now being produced in 60, 100 and 150 watt ratings and their smaller bulb size will be found advantageous for many decorative fittings.

COST CONTROL CONFERENCE, BRISTOL

Applications Invited

A FURTHER conference on methods of the control of building costs at the design stage is to be held at Wills Hall, Bristol, from July 2 to 4, under the sponsorship of the Cost Research Liaison Committee of the Royal Institute of British Architects and the Royal Institution of Chartered Surveyors. The conference will be on the same lines as the Cost Control Conference held at Great Missenden in January last, with most of the original speakers. The Conference arrangements are being made jointly by the RIBA and the Bristol and Somerset Society of Architects.

The RICS, the NFBTE and RIBA Allied Societies within reach of Bristol are being invited to send representatives and there will be additional places open to individuals. Applicants for the Missenden Conference who were unable to obtain a place there are being given priority of booking.

Applicants are asked to write to either the Secretary of the Cost Research Committee at the RIBA, 66, Portland-place, London, W1, or Mr. R. Towning Hill at 18, Orchard-street, Bristol, 1. Details should be given of their age, professional or other qualifications, where they work and in what capacity and what, if any, experience they have in the application of cost control methods, and whether they will require a residential or non-residential place. Applications should be received by May 11.

The Conference fee will be £10 for a residential place or £7 for non-residents (to include all meals other than breakfast).

Similar Conferences will be held at York (October 9 to 11), Manchester (January 2 to 4, 1960) and Nottingham (date not yet fixed). Details of these will be announced later.

The full set of papers that were presented at the Missenden Conference are now obtainable (price 25s.) from the Secretary, RIBA, 66 Portland Place, London, W1. They form a useful reference book on the subject of cost control at the design stage for anyone who is unable to attend any of the above conferences.

LOANS TO LOCAL AUTHORITIES

Figures for Last Quarter

FOLLOWING are details of loans sanctioned by the Minister of Housing and Local Government to local authorities in England and Wales during the quarter ended March 31, 1959:

MINISTRY OF HOUSING AND LOCAL GOVERNMENT	£	£
Housing (land, dwellings, roads, sewers, etc.) ..	63,449,212	
Advances and grants Under Hsg. and S.D.A. Acts	16,016,122	79,465,334
Town and country planning	1,912,128	1,912,128
Sewerage and sewage disposal	8,783,629	
Water supplies	5,369,864	14,153,493
Burial grounds and cemeteries	44,766	
Coast protection ..	279,043	
Crematoria	248,906	
General depots ..	690,715	
General market ..	29,714	
Land for the benefit, etc., of the district ..	513,625	
Physical training and recreation	331,689	
Private street works ..	579,996	
Privy conversion ..	35,158	
Public baths and washhouses	1,416,784	
Public conveniences ..	113,402	
Public libraries and museums	676,171	
Public walks and pleasure grounds	547,237	
Refuse collection and disposal	419,064	
Street cleansing ..	11,774	
Town halls and offices..	1,475,148	
Miscellaneous	944,813	8,358,005
		103,888,960

SURVEY OF THE FUTURE IN CANADA

A Paper at the RICS

MR. ROBERT STEEL, BSc, under secretary of the Royal Institution of Chartered Surveyors, presented a paper entitled 'Survey of the Future in Canada,' at a meeting of the RICS held on April 6 at 12 Great George-street, SW1. Following are extracts from this paper:—

Over the last ten years, Canada has devoted more than 25 per cent of its national output to capital investment, not only for the development of natural resources and the expansion of industry, but also for ambitious programmes of public works and the development of residential estates. Since its own capital resources are inadequate for full economic expansion, participation by foreign investors has been encouraged, with good prospects for substantial capital appreciation.

About 10 per cent of this overseas capital has come from Britain. But a great deal has also been invested in Canadian subsidiaries of foreign companies controlled from outside the Commonwealth, and Canadians are not entirely happy about the way some of these have failed to operate in the best interests of the Canadian economy.

A Thriving Economy

The thriving economy of the country obviously has a bearing upon the use and development of land, with which the chartered surveyor is so closely concerned. The population of Canada has increased by nearly 40 per cent since the war, and the country's progressive immigration policy will cause this growth to continue. Increasing population requires more housing and ancillary services, more public works for highways, harbours, railways, hydro-electric schemes, and many other services.

One can therefore recognise in Canada a state of affairs similar to that which existed in Britain about the time this Institution was founded—a speedily mounting population and an ever-increasing momentum of industrial development, which must inevitably create in Canada, as it did in Britain, a demand for 'able, practical surveyors' to deal with the business of the land. Prospects are not equally bright for all branches of the profession, but looking at the picture as a whole the challenge and the opportunities are considerable.

Some of our members have undoubtedly been discouraged by the apparent reluctance of Canadians to accept professional designations at their face value. Perhaps this is understandable in a country where the letters ARICS had scarcely ever been used until five years ago, and little value had ever been set upon professionalism. But this attitude is changing, and it is likely that the qualifications of chartered surveyors will become increasingly recognised.

Although land in Canada is plentiful, Canadians are beginning to realise that orderly development necessitates good town planning, and they are taking steps to secure it. Most of the principal municipalities now have planning schemes, ranging from complete plans supported by zoning, sub-division and administrative by-laws, down to zoning plans for part only of the municipal area. There is, however, no great volume of local experience of town planning, so opportunities are open to men with British experience, and several chartered surveyors are to be found in the planning administrations for Toronto and other areas in Canada.

New development in Canada since the war has included more than a million houses, required mainly for the 4½ million increase in the population. Much of the residential development we saw was on the grid pattern, with standard-size plots and, on the whole, uninspiring results. There were, however, evident signs of improvement in estate planning, especially where statutory controls are effective. A prominent feature of most suburban developments is the shopping centre, with its supermarket, supported by liberal car-parking facilities.

Some towns, and notably Toronto, have grown large suburban appendages, which have created traffic and transport problems. On the other hand, much energy has been devoted to highway construction, and the way in which the traffic problem has been tackled compares very favourably with what has been achieved in Britain.

Very large amounts have been spent on new highways and skyways, and on new bridges, clover-leaf junctions and other highway improvements. These are very essential facilities in a country with one private car for every five Canadians, and a third of that number of commercial vehicles in addition; but one wonders whether the work has not been carried out too emphatically as an exercise in engineering, rather than as integrated town planning.

Surge of Development

The great surge of new development is throwing into relief the growing need for urban renewal in some of the older centres. Redevelopment schemes have already been undertaken in places such as St. John's (Newfoundland), Halifax (Nova Scotia), Montreal and Toronto. One of the Toronto schemes we inspected is a 26-acre site redeveloped by high-rise apartments and terraced housing to accommodate 734 families. The total cost was $14m.

In the large cities, central area development and redevelopment is mainly in high buildings, in marked contrast with the suburban spread. We were privileged to make detailed inspections of two interesting examples of high buildings—in the 23-storey Imperial Oil headquarters in Toronto (which rises to 295 ft.), and the 21-storey headquarters of the British Colombia Electric Company in Vancouver (285 ft.). These are built in greatly contrasting styles, but each impressed us by the efficiency of its internal planning and the luxury of its finish and equipment. Commercial development generally is of a high standard, and central area shops are often let on percentage leases similar to those prevalent in suburban schemes. Parking in central areas presents a problem, which is being solved by parking-meters and off-street parks, including multi-deck garages and mechanical car parks.

In addition to residential and commercial development, a large amount of industrial building is also in progress. One of the most interesting and important projects is the Grosvenor-Laing development of Annacis Island near Vancouver, which is transforming what was once a swampy duck-shoot into a thriving industrial estate of 1,200 acres, with excellent services and amenities. This estate offers a wide variety of facilities, including 'nursery' factories (3,000-6,000 sq. ft.) for growing enterprises, larger factories (10,000 sq. ft. upwards) for long lettings, and fully serviced sites for buildings constructed for special requirements. We had the privilege during our visit of inspecting work in progress on one of the biggest projects on the estate—Western Copper Mills—which has since been completed at a cost of $8,500,000. This type of industrial estate development seems to be popular in Canada and similar projects are in hand in other places.

Although the construction industry in Canada is extremely active, and seems likely to remain so for many years, this does not provide for chartered quantity surveyors the volume of work that one might expect. The industry, which is greatly influenced by American practices, does not at present use bills of quantities prepared by independent quantity surveyors, and relies almost entirely upon estimators employed by the contractors themselves. A few quantity surveyors are engaged in public service and a small number in private practice, but the latter rely for a considerable part of their work upon the services they can offer to contractors rather than to building owners.

Some Canadian architects would apparently welcome the introduction of the British system of quantity surveying, provided this did not prejudice the standard of architectural practice. Contractors do not appear to be so favourably disposed, but our own members were reasonably optimistic about the future. They can hardly expect a rapid change in contracting procedures, but their faith is indicated by the fact that they have begun preparing a method of measurement that might be used in Canada. The practice of a building surveyor, on the other hand, is inhibited by statutory regulation of the architectural profession. In the Province of Ontario, for example, statute debars anyone other than an architect or contractor from preparing drawings or specifications for any building work costing more than $10,000.

More than a quarter of all Canadian expenditure on construction is devoted to housing. Output is running at about 120,000-150,000 houses a year, and it has been estimated that upwards of 3,400,000 more will be required in the next 25 years. Types of construction are regulated by by-laws in certain places, but three-quarters of all new houses are of frame construction.

Professional Organisations

To round off this brief account of the profession in Canada, it may be useful if I add something about professional organisations and professional education. As regards the former, no Canadian society caters for the whole surveying profession as The Royal Institution of Chartered Surveyors does in the UK. Land surveyors are organised in provincial associations, and in a Canadian Institute of Surveying; the Town Planning Institute of Canada caters for persons engaged in town and country planning; but there are no indigenous organisations of quantity surveyors. For the management and appraisal branches of the profession there are the Canadian Institute of Realtors, the Appraisal Institute of Canada, and three

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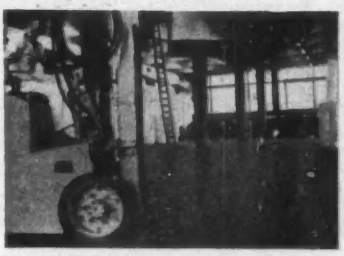

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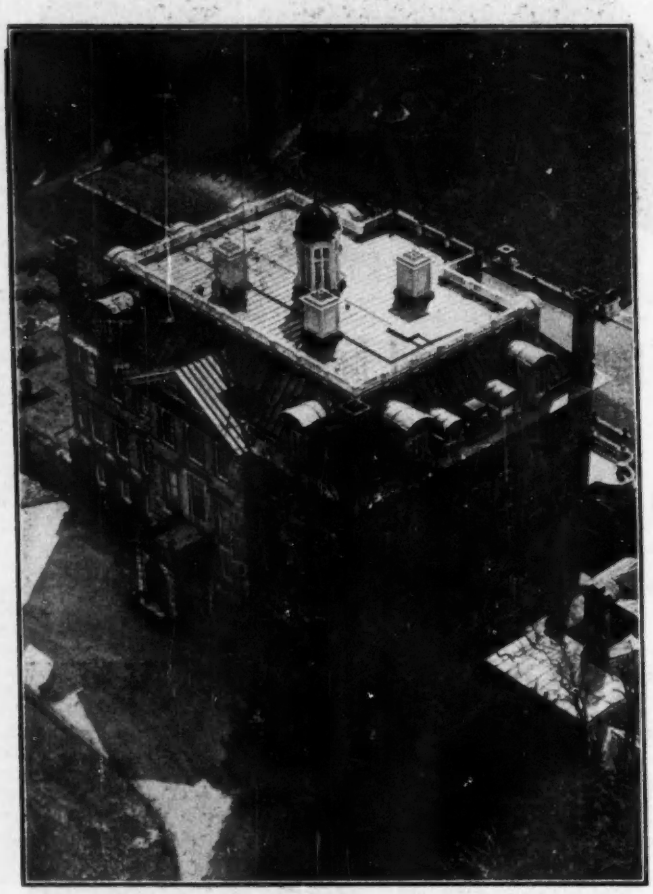

Chartered Architects: Frederick Barber & Partners
5 Apple Market, Kingston-upon-Thames, Surrey

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American bodies of appraisers which have members in Canada.

Public education in Canada is primarily a provincial responsibility, and this has tended to encourage professional bodies to organise on a provincial basis. Many of them have statutory protection for their qualifications, with the consequence that the qualification of one province may not be recognised in another. This is the pattern adopted by land surveyors, for whom statutory qualifying examinations have been established in the provinces for many years.

Apart from land surveying, professional education is not yet far advanced. Canadian universities, however, provide a great variety of vocational courses, and it seems probable that education for surveyors will be organised by them, rather than by professional bodies. In the last few years, for example, courses in town planning have been provided at the universities of Toronto, British Columbia, Manitoba and McGill. The University of Toronto, by arrangement with the Appraisal Institute of Canada and the Canadian Institute of Realtors, is also providing correspondence courses for appraisers. An even more important step forward is the recent establishment of a Chair at the University of British Columbia which has been sponsored by real estate interests in the province, with the object of providing courses for licences, diplomas and degrees.

A Bright Future

On balance, I think they would say that Canada offers a bright future for any chartered surveyor with enough energy and adaptability. There is no doubt whatever that British surveyors can contribute much to Canadian professional life. But they may not readily find ideal appointments, because Canadian practices and customs differ from those in Britain, and immigrants must adapt themselves to Canadian conditions. Those who have adapted themselves best have made the most progress, and there is no doubt that their training and experience equip them well to tackle the new situations they encounter. But it is fatal to go there with any intention of showing Canadians how much better we do things in Britain.

Canada is a virile country with its own way of life, and the best advice one can possibly give to any emigrant is: 'If you go to Canada, become a Canadian.' Even though he may at first feel like a small grain of sand on a very large beach, any surveyor who goes there will find awaiting him the helping hand of many of his fellow-members who have preceded him, and a growing awareness among Canadian surveyors of the significance of the designation 'Chartered surveyor.'

Team Spirit Within the Industry

A film intended primarily to illustrate that there are excellent careers and opportunities available in the building and civil engineering industry, particularly within the Taylor Woodrow Group, was given its first public showing on April 15 at the National Film Theatre, London. With 'team spirit' as its theme the film, entitled 'Changing the Skyline,' dealt with all aspects of the industry, practically and theoretically, and emphasised the opportunities available for the young men in the industry today.

BASIC MATERIALS

Building Prices Remain Steady During March

THE index for basic materials and fuel used in manufacturing industry accounted for most of the 0.5 per cent fall in the index during March.

The March index for all building and civil engineering materials at 144.8* is the same as that for the previous month. The house-building materials index for March at 143.1* is 0.1 higher than that for February (143.0*).

Commodity	Mar., 1958	Feb., 1959	Mar., 1959
Coal	142·9	141·4*	141·4*
Slates	130·0	136·1	136·1
Refractory goods, including bricks	124·1	127·5	127·5
Non-refractory goods, including bricks	110·7	110·1*	110·1*
Building bricks, common, other than fletton, ex-works	112·4	112·2*	112·2*
Building bricks, fletton common, delivered ...	105·2	105·2	105·2
Glass (other than containers)	120·1	121·1	121·1
Cement, delivered	115·3	115·3	115·3
Cast stone and cast concrete products	104·1	102·8	102·8*
Synthetic resins and plastic materials	94·7	90·9	90·7*
Paint for building and decorating	108·9	108·9	108·7
Steel sheets	129·4	127·9	127·9
Aluminium and aluminium alloy products (extruded and drawn)	125·1	124·4	124·4
Galvanised cisterns, tanks and cylinders	112·4	112·4	112·4
Home-grown hardwood ...	108·2	96·0	96·0
Wallpaper	119·8	119·8	119·8
Aluminium, virgin ingots, delivered	126·3	115·4	115·4
Copper, ex-ship, wharf or warehouse	68·4	95·0	99·9
Lead, ex-ship, wharf or warehouse	77·5	72·5	72·1
Zinc, ex-ship, wharf or warehouse	81·1	94·1	96·0
Imported hardwood, ex-yard or wharf	105·7	102·8	102·8
Imported plywood (delivered to consumers) ...	99·6	93·4	93·4*
Imported softwood (delivered to consumers) ...	105·4	94·5	94·5*

* Provisional.

Careers in the Building Industry

The building industry as a career was the subject of a three-day introductory course for final year boys from eight grammar and public schools held in London recently by Wates Ltd., the building and civil engineering contractors. The course included lectures by specialists from all departments of the company including architecture, structural engineering, reinforced concrete, site organisation, and quantity surveying in which the boys undertook a practical exercise. This is the second course organised by Wates for school-leavers. The boys who participated came from schools at Norwich, Reading, Liverpool, Bolton, Bedford, Tonbridge, Bath and Nottingham.

DIRECT LABOUR, BIRMINGHAM

Local Builders' Views

AT THE REQUEST of the Birmingham Association of Building Trade Employers, Ald. P. W. Cox has been undertaking a special study of the implications of the Birmingham Corporation Direct Labour Building Department, the activities of which are rapidly increasing in scope.

The general feeling of the association is that little can be done at local level and that the whole problem of direct labour building is one that must be dealt with at national level. Many members hold that only in the House of Commons can the issue really be clarified. At a recent meeting of the Birmingham Association it was suggested by a member that direct labour building is virtually a form of municipal trading, and that if such trading be permitted by law it would be difficult to state an effective case against the building aspects.

The Birmingham Association believes that the most it can hope for is that contracts shall be put out to open and competitive tender, and it is firmly of the opinion that pressure can and should be put to insist on publication of the financial results of direct labour building.

SAND AND GRAVEL PRODUCTION

MoW Statistics

STATISTICS OF sand and gravel production in various areas of Britain, which are now published by the Ministry of Works ('Sand and Gravel Production 1957-58,' published for the Ministry of Works by HMSO, April 17, 1959, price 9d), show that 46.2 million cubic yards of aggregate were produced in England and Wales during 1958, compared with 46.1 million cubic yards in 1957. In Scotland, output fell slightly from 3.7 million cubic yards in 1957 to 3.3 million cubic yards in 1958.

The largest proportionate increase in production of aggregate in Britain during 1958 occurred in the Middle Anglian region where output rose to 3 million cubic yards from 2.3 million cubic yards in 1957. This increase is largely attributed to the demands of the London to Birmingham motorway.

The figures are published by the Ministry of Works as a guide to producers of aggregate, local authorities and others concerned with problems of land use. They show production in each of the gravel regions and service areas defined by the Advisory Committee on Sand and Gravel, which reported in 1948 and subsequently on the extent to which land should be reserved for the production of aggregates.

This year's report gives for the first time separate figures for production of building sand, concreting sand and gravel. Separate figures are not given for some service areas where the number of firms operating is small and publication might result in the disclosure of the production of individual firms.

BOOKS RECEIVED

COCHIN SAGA. By Sir Robert Bristow. (London: Cassell & Co., Ltd.) Price 30s.

OVER THE DRAWING BOARD. 2nd Ed. By Robert Forman. (Cleaver-Hume Press Ltd.) Price 15s.

TRADE FILMS

Proposal to Set up Study Committee Accepted by Building Industry Conference

A MEETING of representatives of the building industry and others interested —called recently by Films Sub-committee of the RIBA public relations committee—decided to set up a Study Committee to consider what kind of film is required by the building industry. About 60 people from many sides of building were present at the meeting, held at the RIBA, under the chairmanship of Mr. Stanley Meyrick, who is chairman of the Films Sub-committee.

MR. MEYRICK explained that the Royal Institute of British Architects operated Appraisal Panels which saw many trade films likely to interest architects, and published from time to time critical notices of them in the 'RIBA Journal.' The proportion of those notices which could be described as favourable was very small, a majority of the films seen being for one reason or another ineffective in their appeal to architects. The panels were concerned about this, and wished to discuss those characteristics of trade films which they found unsatisfactory and to suggest ways in which approaches to architectural audiences could be made more compelling.

Appeal to Architects

MR. WILLIAM HOWELL spoke for the panels. He said that they were aware that as architects they represented only one section of the public at which most of the films they saw were aimed, and they did appreciate that film sponsors could not be expected to make films exclusively for architects, nor did they want them to. But architects influenced buying very considerably in the building trades, and films which failed to impress architects were certainly missing an important sector of their market. Films were seen by architects at every stage of their career, but not very much used in schools of architecture. During the last two years an attempt had been made to determine why this should be, and a number of schools had taken part in a controlled experiment in which programmes selected from appraised films had been shown regularly. The opinions of art teaching staff and students had been sounded and it had become clear that films would be much more used in schools if good teaching material were readily available on film. But, Mr. Howell pointed out, industry was the main source and most of the films set out to advertise (by methods which did not always credit the audience with a very high degree of intelligence) the products made or sold by their sponsors.

'Films of this sort,' said the speaker, 'not only fail to sell—they build up an active sales resistance in the minds of men only too well aware of the crude technical tricks by which it is intended they should be beguiled. "Information" films,' he was convinced, 'would be far more effective.' The records of the Appraisal Panels showed staggering gaps in the range of subjects so far covered, and there was a big future for the industrialist who was far-sighted enough to fill these gaps with first-class technical films. Such films would never 'plug' a product: they would avoid 'blarney' delivered by professional commentators unsure of the vocabulary they were using: they would dispense with unsuitable music, and choose architectural examples with care and discretion; they would be made specifically for a technically well-informed audience, and would deal with principles and application, using the best possible photography in the most appropriate ways. The reputation which films of this order would gather would ensure them the widest audience and the name of the sponsoring film would be as familiar to those in the building professions and trades as that of Shell was to motorists.

Few Films Pass Test

MR. BADEN POWELL demonstrated by means of a graph that of all the films seen by the appraisal panels over a period of years, only a few could be confidently recommended as worth seeing to audiences of professional people. He read extracts from comments from the schools taking part in the experiment described by Mr. Howell, which showed that the panels were by no means too harsh in their judgments, and though he recognised, as a student himself, that student opinion was liable to be exaggerated, he made it clear that the rare good film made its mark as effectively in the schools as it did elsewhere. The Royal Institute of British Architects would like to see new films on several topics as well as replacements for many of the out-of-date, inaccurate or otherwise unsatisfactory information films that already exist, and would be glad to offer any guidance it could to firms who decided to re-model their film-making policy on these lines.

MR. GONTRAN GOULDEN said that a yearly average of about 40 films is shown in regular once-a-week lunchtime sessions at the Building Centre. The effect of these weekly showings was depressing. Far too much film time —and money—appeared to be wasted on unnecessary 'presentation'—the dressing-up of simple ideas in historic or picturesque trappings; the 'human interest' story; and the use of inappropriate and unnecessary music.

MR. JOHN HUNTLEY, of the British Film Institute, pointed out that all the big industries in this country except the building industry had at one time or another produced films of great significance, some like 'Night Mail' (GPO) and 'Song of Ceylon' winning international awards, and still playing to big audiences after 20 years or more of circulation. He felt that the building industry was in danger of missing a great opportunity in this field, but that to achieve success they must think out their policy afresh, decide clearly what audience they wished to reach and not allow the intrusion of casual ideas to confuse otherwise carefully thought-out scripts.

Better Cutting Required

MR. EDGAR ANSTEY, of British Transport Films, said that student audiences were notoriously difficult to satisfy; the best of documentary films was liable to be ribaldly received if it caught students in an inappropriate frame of mind. He wondered if a possible solution lay in cutting. Film material might be made up in a variety of ways each designed for a specific part of the audience, thus making the maximum effective use of all the material shot while avoiding some of the pitfalls which had been mentioned. He also suggested that contractors might very usefully make 'case history' films of major building projects. Such films would combine historical record with instruction for students and technical audiences, and at the same time serve as admirable prestige material, especially for public relations abroad.

In subsequent discussion, MR. GREGG, of the Gas Council, made the point that industry would not sponsor films unless it knew in advance fairly precisely what order of audience numbers could be guaranteed. Film-making was an expensive business.

MR. GOULDEN said that film-making was expensive because it was so often done in the wrong way. Some of the best building films were those made by the Building Research Station, and he was confident that no money was wasted on them. There was in fact a very large potential audience—anything up to 1,500 architects and surveyors, and as many as 5,000 architectural students but they could not be expected to waste their time looking at expensive but meaningless films. He believed there was a strong case for the cheap film.

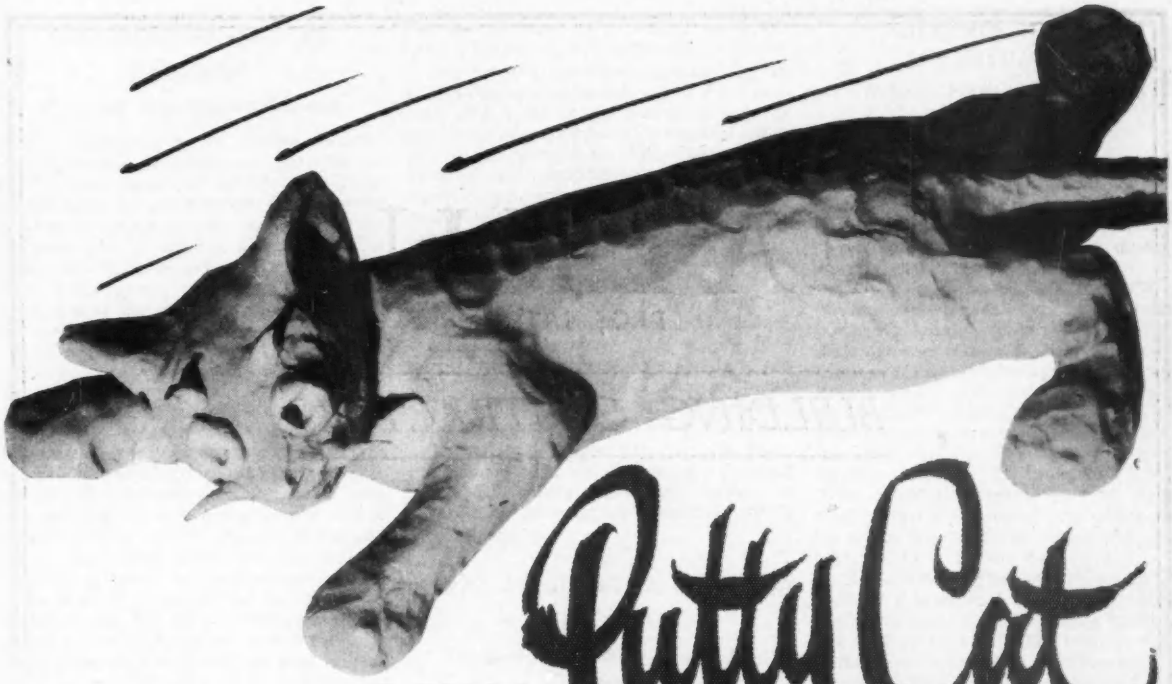
MR. J. ROGERS, Film Officer at the Building Research Station, said that before they embarked on their series of instructional films they surveyed the 'Market' and found it adequate. Bookings of their films, which continued to be high, had amply justified the expenditure, which was, by commercial standards, very modest indeed in the early days. The lively interest of the building public had encouraged them to advance from black and white to colour, and this had increased their production costs, which were still moderate when measured against the 'return' as shown by correspondence and visitors to the station.

Film Sponsors Need Advice

MR. STILLMAN asked what audience, other than architects or surveyors, could be expected to concern itself with films which discussed products for use in building? The general public would admittedly be interested in gas cookers and appliances, but would it want to worry about gas or the intricacies of gas fitting? Who would specify a particular brand of pre-cast floor? Why should the lay public be thought to be interested in such things? These were matters for the professional, and the professional was clearly not being very responsive to the kind of film at present being addressed to him.

MR. A. W. YEOMANS, of the London Master Builders' Association, took up this point and said that it indicated clearly that film sponsors in the building industry needed advice. Should not a study committee be formed, preferably and under the auspices of an independent body, on which could be represented all the interests—sponsor, manufacture and audience—who were concerned with this problem? Such a committee could consider what kind of film was really required by those concerned in the building industry.

This idea was supported by MR. E. ANSTEY, MR. J. HUNTLEY, MR. W. DEACON, of Aluminium Development Association, and by MISS DOWLING, of Shell, and the chairman said that his committee would certainly examine it at the earliest opportunity.



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STANDARDISATION IN BUILDING

Progress Meeting at Geneva

THE Secretariat of the United Nations Economic Commission for Europe (ECE) has issued an agenda previously agreed upon by governments, for a special meeting on standardisation and modular co-ordination to be held in Geneva, in the Palais des Nations, June 17 and 18 next. The conclusions and recommendations arrived at at this meeting will be submitted to the ECE Housing Committee, under whose auspices this meeting will be held and which is to convene immediately after, e.g., June 19 to 23.

The purpose of this meeting is to take stock of the progress already made and to consider what further action could be taken to promote and accelerate the practical application of standardisation, especially from the point of view of reducing the cost of house-building, and to examine the impact of standardisation on international trade in building materials and components.

In view of the scope and nature of this meeting, the Housing Committee recommended that participation should be on a wider basis than normally and that in addition to the delegates from participating countries and representatives of the international technical and professional organisations concerned with aspects of housing and building, it would be desirable if national delegations could include representatives of manufacturers of building materials, house-building contractors and public and semi-public housing organisations.

The preparation of special reports and other arrangements are in the hands of the ECE Secretariat who are assisted by leading European experts nominated by their governments on the invitation of the ECE Housing Committee.

Principal Questions

The principal questions which will be examined are the following:—Standardisation at the national level: (a) Steps taken by governments or official bodies responsible for regulations or standardisation. (b) Steps taken by housing authorities, associations of building societies, building co-operatives, etc. (c) Steps taken by the building industry, professional organisations of producers and manufacturers of building materials, components, machinery, etc.

Standardisation at the international level: (a) Activities of inter-governmental organisations. (b) Activities of international non-government organisations of a technical character. (c) Activities of international professional organisations.

The present position regarding international trade in building materials and components.

Other important questions which will be examined by the Committee at this session are: European housing trends and policies in 1958; a report which is prepared annually by the Secretariat reviewing the main developments, obstacles and achievements in the preceding year; slum clearance policies and programmes; and a report being prepared by the UK delegation on the policies pursued in different European countries and methods of preparation with regard to programmes for the clearance of dwellings unfit for human habitation, and re-housing problems.

This meeting has been sponsored by the ECE Housing Committee within the framework of a broad project concerned with the promotion of industrialisation and cost reduction in house-building. The Committee is carrying out a comprehensive inquiry on the effects of measures designed to encourage the technological development of the building industry and thus reduce housing costs.

Delegates have been invited at the end of the Committee session to take part in a group visit to the USSR to study and observe on the spot various aspects of housing, building and planning. This is part of a long-term programme of group visits of this kind to different countries. The visit to the USSR is planned to cover Kiev, Leningrad and Moscow and will last about 12 days.

The present Chairman of the ECE Housing Committee is Mr. C. Bonnome (France), Inspecteur général, Chef du Service de l'Inspection générale au Ministère de la Reconstruction.

FATAL ACCIDENT IN ERECTION OF CRANE

Inquest Jury's Rider on Safety Precautions

WHILE a 28-cwt. overhead crane being assembled at a West Bromwich works was being lifted to its gantry, 13 feet above the ground, it fell and fatally injured a 22-year-old workman who had been working for the firm for only four days, an inquest jury was told on April 7.

JOSEPH ASHMORE, of 180 Birmingham-road, West Bromwich, a director of Ashmore's (Builder) Ltd., Stonehouse Works, Houghton-street, West Bromwich, said the crane was being lifted into position by a mobile crane on March 12.

An instant before the accident occurred he warned the man who was killed, Derek Frederick Wheatley, of 28 Heronville-road, Hill Top, West Bromwich, to come from underneath.

He thought the load caught against a projection on the mobile crane, causing a loop of the sling to slip off the hook of the crane.

Ashmore said several men lifted the crane which was pinning Wheatley to the ground, and his brother, 29-year-old Alan George Wheatley, pulled him clear.

MR. R. E. SAWYER, Inspector of Factories, told the coroner, Mr. A. D. Clark, that in a factory there was no regulation which required a safety hook to be used on a crane. Building regulations required safety hooks when cranes were used on building sites, and it might be a good idea for similar regulations to come under the Factories Act.

The jury returned a verdict of 'accidental death' on Derek Frederick Wheatley, adding a rider that they felt more care could have been taken with the slinging and lifting of the crane and that a safety catch or some similar measure should be used in future on the hook of the mobile crane which was used.

The Inspector of Factories added that, though the type of work in which the accident occurred did not call for a patent type of safety hook, it was quite easy to make one and that was often done.

CHANNEL TUNNEL INVESTIGATION

British Firm Appointed by Study Group

By a Correspondent

INVESTIGATIONS into possible routes for the Channel Tunnel are being resumed immediately by a British firm commissioned by the Channel Tunnel Study Group to obtain specimens of rock from depths as much as 200 ft. below the sea-bed.

The object is to confirm the 1958 geophysical survey made at sea by an American company using electronic equipment. Although the survey, to be completed this summer, shows astonishing agreement with a French survey made in the last century, it is felt necessary to make an additional check from a series of boreholes sunk from a floating craft by the Central Laboratory of George Wimpey & Company, Limited. Their method, pioneered in the Arabian Gulf, makes it unnecessary to construct the usual drilling platforms which cost up to a quarter of a million pounds each.

The contract for the work was won in the face of international competition when a variety of suggestions for boring beneath the sea were put forward. The Wimpey Organisation was chosen after the Channel Tunnel Study Group's officials had watched a team from that company sinking boreholes off-shore in connection with the sea-water intake and outlet of the proposed nuclear power station at Dungeness.

Scope of the Survey

Under the Channel are three layers of chalk beneath which lies gault clay and then greensand filled with water which exerts an upward pressure. Only the lowest layer of chalk is impermeable and the object is to find a route where this layer of chalk is fault-free and thick enough to ensure safe tunnelling.

The ship to be used is the Ian Salvor 111, a shallow draft tank landing craft which has been specially fitted out. This craft sailed from Dover on April 3 equipped with a boring platform cantilevered over the side and the necessary mooring winches.

The present work, for which permission had to be obtained from the Ministry of Transport and Civil Aviation on account of shipping, will continue day and night unless interrupted by particularly bad weather. There will be two teams of four men in the charge of Mr. E. Mackay, a chartered civil engineer and Mr. G. Waugh, general foreman.

The borehole position will be selected on instructions from the Channel Study Group engineers by the Decca Radar System and checked by optical survey to landmarks. Borings will be by diamond drilling through a lining tube entered into the sea bed.

It is proposed to remove 6 in. cores of undisturbed rock for laboratory analysis. Other tests will include pumping water into the borehole to test absorption at various levels, and logging by the Schlumberger method much used in oil well drilling, which involves lowering special equipment down the borehole to record soil properties.

After the tests are complete the boreholes will be cement grouted to prevent the entry of water through the boreholes on the ultimate route chosen for the tunnel.

IN PARLIAMENT

By Our Parliamentary Correspondent

THE LONDON-YORKSHIRE MOTORWAY

A DEBATE on the proposed line of the London-Yorkshire motorway through Leicestershire was initiated by MR. BARNETT JANNER on April 13. He said many people felt that one proposal by Leicester City Council would seriously affect the beauty of Charnwood Forest. People were disturbed that a unique amenity area and a stretch of country unrivalled in scenic and geological value in the Midlands would be so adversely affected by the scheme then contemplated. A petition was handed to the Minister, who asked Leicestershire to produce an agreed line. The new proposal was prepared and submitted last September. Local people wanted to know the difficulties as there had been ample time to re-examine the problem.

MR. NUGENT, Parliamentary Secretary to the Ministry of Transport, said the 1956 proposal for a route through Soar Valley met with strong farming opposition. Consultants subsequently advised on the Charnwood Forest line. The Minister decided after the petition that this perhaps was not the best line to proceed with, and so Leicester City Council suggested a third.

The Ministry then appointed their consultant, Sir Owen Williams, with the county surveyor, to work out the cost of all three lines. They reported in February, and since then Ministry engineers had examined that report and had reported to the Minister. It now appeared that unhappily even the third line was not without objections.

The first was that it cost £500,000 more than the Charnwood Forest line and £1m. more than the Soar Valley line. The elevation of the third line and the gradients involved were both unattractive to traffic, especially heavy traffic. The logical course seemed to the Ministry to be to consider again the original Soar Valley line which was at least the best on grounds of cost, traffic and engineering, although it had weighty objections of agricultural interests. To this end they had reopened discussions with the Minister of Agriculture.

It might be that the practical experience of the effect of a motorway on farming interests which could now be seen where the London-Birmingham motorway ran, and the methods by which they had been able to deal with severance by means of tunnels under the road or bridges over, might ease the objections of the farming interests concerned. At any rate, he hoped so. Certainly their hope was that they would be able to reconcile the objections in due course as far as possible, so that they could publish their proposals for a line by means of a draft order.

He would stress that, however keen they were to build these roads, it was only right and proper, and he was sure the House would expect it of them, that they should pay full attention and consideration to the feelings of the local people whether they were for amenity, farming or anything else. The remainder of the line from Northamptonshire to the Doncaster by-pass had been cleared with the various interests and the county councils and was now protected in the county development plan.

THE TOWN AND COUNTRY PLANNING BILL

LORD SILKIN, the former Minister of Town and Country Planning, maintained during the second reading debate on the Town and Country Planning Bill in the House of Lords on April 14, that the increased compensation which would have to be paid under the provision of the measure, would act as a deterrent to public development and redevelopment.

It was no good blinking the fact, he said, that the Bill would mean a higher cost to local authorities who were already hard pressed and who would be deterred from carrying out expensive schemes because of the considerably higher cost that this change would involve. The question arose whether it was proper to put this extra burden on those particular localities where the burden of requiring redevelopment was already great.

The Royal Institute of British Architects had put forward a simple scheme which would, in part, remedy this defect. Their suggestion was that the local planning authority should still be required to be responsible for compensation on the existing 1954 basis and that the Government should recoup them for the excess. He hoped in due course to put forward their idea by way of an amendment. If that were done he believed the burden would fall where it should, and the cost of carrying out the redevelopment would be incurred mainly by those local authorities who had to carry out the development but in so far as this was, generally speaking, a burden on the poorer authorities, the Exchequer would be making a contribution—the extra cost incurred as a result of the Bill.

Under Clause 10, which provided for additional compensation to owner-occupiers of slum property, he hoped to suggest in the form of an amendment that such an owner should be repaid for his land on the basis of the value of the surrounding land. Alternatively, he would suggest giving five times the annual value.

VISCOUNT KILMUIR, the Lord Chancellor, said that the additional cost of land acquisition by local authorities was estimated at about 25 per cent although there would be wide variations from area to area. That meant an increase in the gross cost for the whole country of about £8m. a year. The net extra cost falling on local authorities would be a great deal less because part of the cost would be met out of Exchequer grants.

Groundless Fears

When he moved the second reading of the Bill earlier, THE LORD CHANCELLOR said the new basis of compensation was founded on the principle that the owner of the land should receive the value which he would have expected to get for his land in a private sale in the open market if there was no proposal by any public authority to buy the land. This principle should be generally acceptable but it was apparent from statements made in the House of Commons that there was a fear in some minds that the Bill would resurrect the monster of 'floating value' which, as the Uthwatt Committee explained, arose where, for example, land was being developed on the fringes of a town.

The fears were groundless. The circumstances of to-day were radically different from those about which the Uthwatt Committee wrote, mainly because of the system of planning control under the 1947 Act. Development without planning permission was now unlawful, and if permission was refused, compensation was limited to the 1947 development value. The combination of these factors had largely eliminated floating value. The monster had been killed or at any rate, it had shrunk to the size of a very small mouse.

The Bill was read a second time.

SCOTTISH INDUSTRY AND EMPLOYMENT

REVIEWING the fortunes of the Scottish building and civil engineering industries last year, the Scottish Home Department's White Paper *Industry and Employment in Scotland, 1958*, published on April 15, states that there was a tendency for more firms to engage in all trades work and for contracts to be let on the main contractor system instead of on the separate trades system.

The White Paper explains that the industries were affected by measures taken by the Government at the end of 1957 to restrict investment. Although there was a fair amount of work in hand at the beginning of the year, the fall in new work during the year resulted in spare capacity in almost all parts of the country and keen competition for new orders. Following the lead of Government departments, more authorities pre-planned their building and civil engineering projects and let their contracts on a fixed price basis. This in turn led to quicker progress on sites and to some stabilisation of the prices of building materials.

The total value of work carried out by contractors and public authorities was estimated at £220m., about the same as in 1957. There were 32,170 houses completed, 267 less than in 1957. At the end of the year 29,724 houses were under construction. The value of work done by local authorities on schemes of public water supply, sewerage and sewage disposal amounted to £6.7m. compared with £6.5m. the year before. The educational building programme continued to expand and at the end of the year projects to the value of £26.6m. were under construction. Outstanding among civil engineering projects started was the Forth Road Bridge.

The average number of people (including office staffs) employed on building and civil engineering work at mid-1958 was estimated at 154,650 compared with 162,500 at mid-1957. Unemployment was consistently higher, particularly among craftsmen such as joiners and bricklayers. A census showed that, while the labour force employed was about 10 per cent greater than 10 years ago, the number of firms had decreased from 9,358 to 7,835 and the number of firms employing fewer than 20 men had decreased from 8,504 to 6,894. The number registered in the Building Apprenticeship Scheme decreased from 1,124 in 1957 to 885 in 1958, the reduction in joiners, bricklayers and painters being particularly noticeable.

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Whatever size a bathroom is to be, a Bilston Atlanta can be specified. Made in five sizes, the Atlanta has the superior Bilston finish and durability, plus design features that make it particularly safe and comfortable. No matter how large the estate, standard specification of the Bilston Atlanta ensures complete satisfaction. The Atlanta has been selected for the Design Centre and costs no more than an ordinary bath.

- Atlanta
- Magna
- Cresta
- Marina
- Mermaid
- Bermuda

A BILSTON BATH

ALL THIS WITH THE ATLANTA!

Flat Bottom—the Atlanta flat bottom helps to prevent slipping . . . ensures comfort. Particularly suitable where a shower is to be fitted.

Safety—the low sides make the Atlanta safer for young and old. It can be fitted to give an overall height of only 16".

Taps can be fitted centrally, or on either corner to facilitate installation and maintenance.

Fittings—the Atlanta is supplied with or without hand grip. The feet can be adjusted to accommodate all types of trap, including the Bilston "Wasteflo" prefabricated waste trap and overflow unit.
Also available with the Bilston O.P. Hand Grip specially designed to meet the needs of the elderly or infirm.

Colours—the Bilston range includes white, or the exact colour required for any decorative scheme.

BILSTON—the bath *SPECIALISTS*

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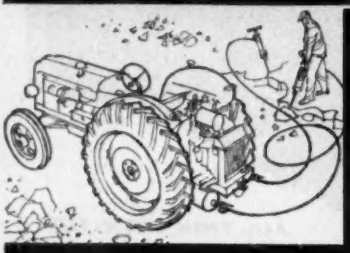
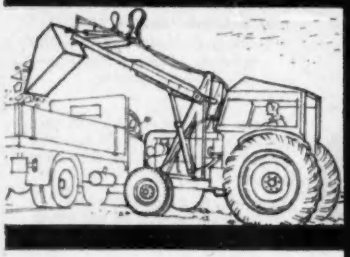
Looking for lower costs? you'll find them in . . .

Fordson Power





Maximum output at lower cost must be the target of all mechanical equipment. The surest way to that target is to harness your equipment to Fordson Power. Fordson tractors cost less to buy, less to run. Their outstanding reliability and the efficiency of the Fordson service and spare parts organisation ensures that lost time is cut to a minimum. Their versatility and the wide range of specially designed equipment available ensures maximum utilisation at all times. Your Fordson Tractor Main Dealer will show you how Fordson Power can cut your costs.

Reduce your costs with profitable

Fordson Power

TRACTOR DIVISION FORD MOTOR COMPANY LIMITED · DAGENHAM · ESSEX

All building materials were in good supply. The demand for Scottish stone increased and some quarries had difficulty in meeting orders. The quantity of cement used was estimated at 922,000 tons (75,000 less than in 1957) of which 269,000 tons (29 per cent) were produced in Scotland.

The White Paper also reports that up to the end of January, 1959, 26 firm and eligible applications had been made for schemes in Scotland under the Distribution of Industry (Industrial Finance) Act, and eight had been recommended for approval, six of them in the Highlands.

OTHER BUSINESS

New Hospitals Since 1951

MR. HAYMAN asked the Minister of Health on April 13 what new hospitals had been built in England and Wales since 1951; and what was the cost of each.

MR. WALKER-SMITH wrote in reply: 'No new hospital has been completed in its final form. Five are partly completed and in use, but as there are to be later stages the final cost is not yet known; and work has started on nine others.'

MR. R. THOMPSON, Parliamentary Secretary, stated in another written answer: 'A considerable measure of agreement has now been reached on the sketch plans of the first phase of the new area hospital at Truro, but I cannot say at present when building work is likely to start.'

Progress of Bills

NO CHANGES were made to the House Purchase and Housing Bill when it passed through its committee stage in the House of Lords on April 16.

The House of Commons, having agreed on April 16 to the Lords' amendments to the Building (Scotland) Bill, the measure has now completed its passage through both Houses and awaits the Royal Assent.

The Rating and Valuation Bill was read the third time by the House of Commons on April 16.

Music Centre, Regent's Park

MR. KENNETH ROBINSON asked the Lord Privy Seal on April 16 if he had approved the proposal of the Crown Estate Commissioners to allow the Royal College of Physicians to erect a new building on the site of Someries House, Regent's Park; and to what extent this development implied the abandonment of the plan, supported by both the Gorell Committee and the committee to consider a new Queen's Hall, to build a music centre in Regent's Park.

MR. R. A. BUTLER: 'I approve generally the proposals for Regent's Park recently published by the Crown Estate Commissioners, including the proposed use of the Someries House site. The plan to build a music centre in Regent's Park falls within the scope of the Arts Council's survey of cultural building needs, and I must ask Mr. Robinson to await the early publication of that Council's report.'

MR. ROBINSON: 'Does not the proposal of the Crown Estate Commissioners very much prejudice the future of a scheme which is imaginative, which received the support of two Government committees and which would have been of great benefit to London and North London particularly?'

MR. BUTLER: 'I agree that in accepting the alternative occupancy of this site at Someries House, the Commissioners have to that extent prejudiced the building of a music centre there; but I do not think we should necessarily regard the matter as concluded, and I think we should await the Arts Council's survey before we make a final decision.'

London-Birmingham Motorway

MR. GRESHAM COOKE asked the Minister of Transport what arrangements he was making for the provision of fuel, catering and other facilities on the London-Birmingham motorway.

MR. HAROLD WATKINSON wrote in reply on April 15: 'Invitations to tender are being sent on April 17 to all those persons and organisations that have expressed an interest in developing these facilities. Copies of the tender documents will be available on that date for any other firms that apply. I propose for the present to develop fully two service areas, at Newport Pagnell, and at Watford Gap in Northamptonshire. Each area will contain petrol filling stations, emergency breakdown and repair facilities, catering services for commercial drivers and private motorists, toilets, telephones, and parking space.

'It is not my intention at this stage to permit overnight sleeping accommodation. Licensed premises will not be allowed, although the successful tenderers may apply if they wish to the licensing justices for a table licence.'

Oxford By-Pass

MR. PARKER asked the Minister of Transport on April 15 what would be the extra cost of constructing the south and east Oxford by-pass as a result of starting work before purchase of the necessary land was completed.

MR. G. R. H. NUGENT, Parliamentary Secretary, wrote in reply: 'There have been unexpected difficulties in acquiring all the land required for the Oxford western by-pass, as a result of which the contractors may lodge a claim.'

Barrack Rebuilding

MAJOR LEGGE-BOURKE asked the Secretary of State for War if he would make a statement regarding barrack rebuilding in the London district, showing how many projects had been delayed and the reasons for postponement.

MR. FRASER, Under-Secretary, War Office, wrote in reply on April 15: 'Ten major projects are envisaged for London district. Six of them had to be delayed because of the re-organisation and redeployment of the Army. The new work on Wellington Barracks has also been held back in order to avoid having more than one barracks occupied by Her Majesty's Household troops out of use at the same time.'

Identical Tenders

MR. SWINGLER asked the President of the Board of Trade on April 14, if he was aware that, despite the termination of the registered restrictive trading agreement relating to cast iron pipes, on December 31, 1958, the Staffordshire Potteries Water Board continued to receive identical tenders for the supply of such pipes; and if he would therefore reconsider his previous decision and instruct the Registrar of Restrictive Trading Agreements to give this matter priority before the Restrictive Practices Court.

SIR DAVID ECCLES: 'If it is believed that the agreement is still effective evidence should be sent to the Registrar, since it is his responsibility, and not that of the Board of Trade to deal with allegations that the agreement is in fact continuing or has been renewed.'

MR. SWINGLER: 'Is the Minister aware that the Water Board followed his advice after the so-called termination of the agreement, asked for new tenders and once again received identical tenders from four firms? Does not this show that the termination of the agreement is merely phoney?'

SIR D. ECCLES: 'The Board has informed me of these identical tenders. I cannot say whether that price agreement is still in existence or not, but I have passed the information to the Registrar who presumably will deal with it now.'

Investment Allowances

WHEN the debate on the Budget proposals was resumed in the House of Commons on April 13, MR. SIMON, Financial Secretary to the Treasury, said he was able to give an assurance that the allowances for dry dock construction did benefit from the Chancellor's proposals for investment allowances. He had restored the 10 per cent investment allowance for expenditure on the construction of industrial buildings and a dry dock ranked as an industrial building for this purpose. Moreover, since 1956 expenditure on the excavation, as well as the concreting and construction, of a dry dock had had the industrial building allowance.

Therefore in the Budget proposals, capital expenditure on the construction of a dry dock would get the 10 per cent investment allowance and the five per cent initial allowance, while any plant and machinery installed in connection with the dock, including dock gates, would get the 20 per cent investment allowance and the 10 per cent initial allowance.

Development on Trunk Roads

VISCOUNT LAMBTON asked the Minister of Transport whether he was aware of the directions being given by his divisional road engineers to local planning authorities to refuse consents for development of land abutting on trunk roads, which had the effect of sterilising such lands; and what was the general policy of the Government in this matter.

MR. HAROLD WATKINSON wrote in reply on April 14: 'As far as is reasonable the construction of new accesses to trunk roads or increases in the use of existing accesses should be kept to the minimum, in order to minimise the effect on traffic using the roads. This is our general policy but each application has, of course, to be considered on its merits.'

Council House Building

MR. DOUGLAS JAY asked the Chancellor of the Exchequer on April 14 if it was the wish and the policy of the Government that council house building should expand in the present year.

MR. HEATHCOAT AMORY: 'Yes. Steps have been taken in the present year, and council house building is expanding.'

NEWS IN BRIEF

The Workings of a Ministry

THE Ministry of Transport is the department fully described in the latest volume, the seventh, in the new Whitehall series published by G. Allen & Unwin Ltd., 40 Museum-st., WC1. The author of the book, entitled 'The Ministry of Transport and Civil Aviation.' Sir Gilmour Jenkins, KCB, KBE, MC, was permanent secretary of the Ministry of Transport from 1947-1953 and has served as permanent secretary of the combined Ministry of Transport and Civil Aviation since the amalgamation in 1953. The object of this series is to provide authoritative descriptions of the present work of the major departments of the central government. It has been prepared under the auspices of the Royal Institution of Public Administration. The general editor is Sir Robert Fraser. The price is 21s. net.

Mr. S. Romilly Hall

An informal gathering and luncheon was held in the board room of John Hall and Sons, Ltd., at Bristol on Friday, March 13, to celebrate the 80th birthday of the company's President, Mr. S. Romilly Hall.

DSIR Bulletin

A Forest Products Research Bulletin, No. 44, has been issued by DSIR. The bulletin, entitled 'Heat Penetration in the Pressing of Plywood,' has been written by Mr. J. F. S. Carruthers, BSc. Copies are obtainable from HMSO, price 1s. 9d.

'Accidents'

The April issue of 'Accidents,' the quarterly journal published by HMSO for the Ministry of Labour and National Service, gives details on how accidents happen, and how to prevent them. The publication is based on certain accidents notified to HM Inspectors of Factories. Copies from HMSO, price 1s. 3d.

Industrial and Factory Law Course

The whole of the legal groundwork necessary to industrial managers and executives is covered in a three-day course on industrial and factory law to be given on May 26, 27 and 28 by Mr. H. Samuels, OBE, MA, barrister-at-law, under the auspices of the Industrial Welfare Society. The course will be held at the society's headquarters, Robert Hyde House, 48 Bryanston-square, London, W1.

Course on Road Construction

The Cement and Concrete Association has arranged a two-day training course on road construction with particular emphasis on dry lean concrete bases. This will be held at the County Buildings, Inverness on May 5 and 6 of this year, starting at 9.45 a.m. A number of well-known engineers have been invited to lecture on the course in addition to members of the association's technical staff. The course also includes a full-scale demonstration of dry lean concrete base construction which has been arranged in conjunction with the Scottish Home Department and Inverness County Council.

Advisory Council Publications

Two publications have been issued by the London and Home Counties Regional Advisory Council for Technological Education. The first, which is the 10th annual report, was submitted to the local education authorities of London and the Home Counties in October last. The second publication, entitled 'Bulletin of Special Courses in Higher Technology' (Part II: Spring and Summer Terms, 1958-59), contains up-to-date information and details on various courses which have been arranged by certain Colleges. Copies are obtainable from the Secretary of the Council, at Tavistock House South, Tavistock-square, WC1.

THE INSULATION GLAZING ASSOCIATION

New Body Formed

THE formation is announced by the National Federation of Constructional Glass Associations, 6 Mount-row, W1, of the Insulation Glazing Association. Its main objects are: To promote the use of insulating glazing in its various forms; and to establish a high standard of practice and performance by co-ordinating development and research, by the adoption of minimum standards of performance and by the development of test procedure.

The Association's membership will comprise glass manufacturers, manufacturers of sealed units, manufacturers of metal and wood double windows, timber and metal frame makers, the makers of fixing and sealing compounds, patent glaziers and glazing contractors, as well as architects and others for whom associate membership will be available. There will, in fact, be a pooling of knowledge and effort on the part of all concerned with thermal insulation glazing.

Officers and committees will be elected at the first general meeting, which will be held early in June.

EXPANSION OF DROITWICH

Government Support Sought for Town Development Act Scheme

THE Government is to be asked if it will support a scheme to set up a joint committee to operate a Town Development Act scheme for Droitwich in connection with the reception of overspill from Birmingham.

A private meeting of representatives of the four authorities concerned, the councils of Worcestershire County, Birmingham City, Droitwich Borough, and Droitwich Rural District, was held at Droitwich on April 7.

Afterwards the Clerk to the County Council, MR. W. R. SCURFIELD, said that the possibility of forming a joint committee to operate a Town Development Act scheme for Droitwich had been discussed. The representatives had agreed to ask the Government if it would support such a scheme in the event of agreement between the councils being reached.

COMPANY NEWS

Ruberoid Company Ltd., recommend payment of a final dividend of 14 per cent (less tax) on the ordinary shares of the company, payable on April 30 next, for the year 1958.

Swinnertons Ltd., recommend payment of a final ordinary dividend of 20 per cent (less tax) on the shares of the company for the year ended December 31, 1958.

LMBA

President on the Need for 'Active Propagandists'

WELCOMING the new Area Chairmen at his first meeting with them for the year on Monday, the President of the LMBA, MR. K. J. PEARCE, said that during their year of office he wanted them all to be active propagandists for the LMBA.

'It is not enough,' said Mr. Pearce, 'just to pay your subscription and do nothing. I want you and your members in on the work. Wherever you go, whenever you meet other builders, tell them of the good work of the LMBA, and if they are not already members, bring them into the fold. Many organisations complain that far too many of their members are content just to pay their subscriptions and make no active contribution to the work. The LMBA, too, suffers in this way, and I want you to keep on reminding members of their responsibilities.

'All the best builders in London, of course, already belong to the LMBA,' Mr. Pearce continued, 'and they're not there just for the good of their health. They're there because they know it is worth their while to be there and because they daren't be outside.

'So, if you know of any good builder who for one reason or another is not a member of the LMBA, see if you can bring him in. Or, if you prefer it that way, send us his name and we'll get after him from Bedford-square.'

Luncheon to Lord Mayor

IN THE ABSENCE of the President, Mr. Basil Spence, Mr. J. H. Forshaw, one of the Royal Institute's Vice-Presidents, is to represent the RIBA at the LMBA luncheon to the Lord Mayor at the Savoy Hotel next Friday (May 1).

Others attending include the chairmen of the LCC and of the Middlesex County Councils; the Mayor of Westminster, Ald. and Sheriff R. E. Perring, Lord Ashcombe, Sir Godfrey Mitchell, Sir Frederick Minter, Sir Keith Joseph; the Masters of the Worshipful Companies of Painter-Stainers, Plumbers, Tylers and Bricklayers, Blacksmiths, Plasterers, Glaziers, Paviors and Joiners; and the Presidents of the RICS, the Architectural Association, the Institute of Builders, the National Federation of Building Trades Employers, the National Federation of Building Trades Operatives, and the Federation of Civil Engineering Contractors.

Education Conference

THE LMBA's Annual Education Conference is to be held this year in Ironmongers Hall on November 12.

PERSONAL COLUMN

MR. J. A. TOMLINSON, managing director of Ford and Weston Ltd., building contractors of Derby and Cheltenham, has now also become chairman of the company in succession to the late MR. OSWALD J. JACKSON. The new vice-chairman of the company is MR. D. E. SMITH of Sidmouth, Devon, while MR. W. MELLOR, of Breadsall, Derby, has been appointed general manager and a director.

MR. L. BAILEY has been appointed a director of United Steel Structural Company, Ltd., Scunthorpe, a subsidiary of The United Steel Companies, Ltd.

Medway Buildings and Supplies, Ltd., announce that MR. N. HILL has joined the company as additional representative in the London area to deal with increased business.

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have many advantages :—

COLOUR: Available in many attractive shades; including Cream, Buff, Golden, Light Brown, Terracotta, Lilac, Purple, Silver-Grey, Blue-Black.

Fine modern buildings demand

DURABILITY: Will withstand severest weather conditions.

STRENGTH: Extremely hard. Uxbridge Flint Bricks have a crushing strength to suit most requirements.

LIGHT REFLECTION: Because of the unique hardness and texture of the brick, dirt and soot are less likely to work into it.

Fine modern bricks

Bowater House, Knightsbridge, S.W.1. No 90 Lilac 2" Bricks used for facing the tower block.

Architects: Guy Morgan & Partners. Photo by courtesy of The Bowater Organisation.

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TECHNICAL REVIEW

This Review of plant, equipment and materials—in most cases new or with new features—is intended to give brief details only of the products mentioned. Notices are based on data supplied by the manufacturers. Additional information and prices can be obtained either direct or by using the prepaid Readers' Service form which appears on page 59 of this issue. The form can be used for more than one inquiry.

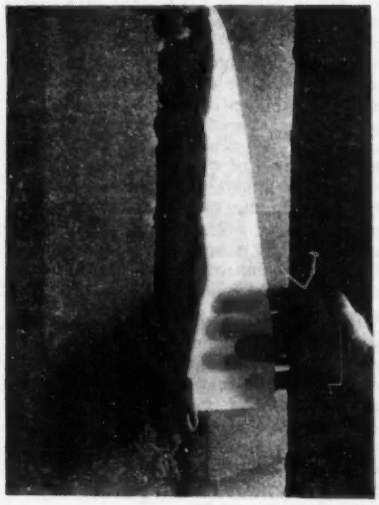
CONTRACTORS' PLANT

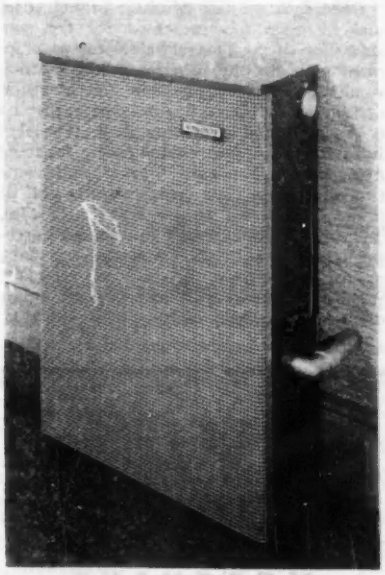
'CONSPRAY' HOSE: for efficient curing of concrete the hose, which consists of a length of perforated plastic sprayline, is connected to the normal water supply lines. It is then placed on and around the hessian covering freshly poured concrete and the curing material is constantly kept in a moist condition. The operation is simple and can be controlled from a single valve. This hose, which has special perforations at 2½ in. centres to avoid clogging, is now offered in standard multiple lengths of 100 ft.
Cable Covers, Ltd.,
St. Stephen's House, Westminster, SW1.

RADIOACTIVE MEASUREMENT: a Prototype instrument has been tested for determining exact positions through walls and floors. It does this without grid lines or tell-tale holes and has been found to save a great deal of time. The design has been patented but it is not yet in manufacture. The apparatus comprises a capsule of radio-active caesium mounted in a protective container which emits a collimated beam of gamma rays from one side of the structure. A scintillation counter connected to a specially mounted crystal picks up this radiation, and from the readings the position can be fixed to within an accuracy of one sixteenth of an inch through nine inches of concrete. No serious loss of accuracy was found even when there were as many as three intersecting one inch diameter steel reinforcing bars in the concrete.
Percy Bilton Ltd., Park-street, W1.

MUIR-HILL 10B DUMPER: A stronger, more powerful version of the 3 cu. yd. dumper gives an exceptionally high degree of driver comfort with hydraulic brakes, and clutch, light steering, a weatherproof cab and carefully located hand controls. Powered by a Fordson 'Power Major' 3.61 litre 4-cylinder diesel engine which develops 52 b.h.p. at 1,600 r.p.m. and an increased maximum torque of 171 lb./ft. at 1,200 r.p.m., power is transmitted through an hydraulically actuated dry plate clutch to a constant mesh gearbox providing six forward and two reverse speeds. Hydraulic transmission is an optional extra.

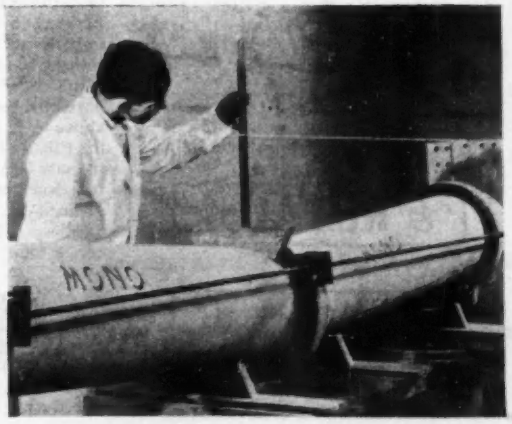
A range of gravity and hydraulic tipping bodies is available, together with a selection of tyres. Muir-Hill 2-way drive, whereby the seat and steering column can be rotated to face the direction of travel, is standard.
G. Boydell & Co., Ltd.
Old Trafford, Manchester.





above: *Insulating a cavity wall with 'Uflex' pvc film. The wall is then filled with insulating material*

above right: *A 'Simplicity' oil heater*



right: *A pair of concrete drainage pipes fitted with 'Tylox' rubber joints being flexed to 9 degrees while maintaining an internal water pressure of 20 lbs. per sq. in.*

DRAINAGE

'TYLOX' FLEXIBLE DRAINAGE PIPE JOINTING: A ring of natural rubber is fixed into the socket of a pipe with an impermeable and unshrinkable mortar. The profile of the joint has projecting fins which provide a multiple seal when the spigot of the next pipe is pushed home. The life of the seal is as long as that of the pipe. The 'Tylox' joint is of the full compression type which is claimed to have a longer life than the tensional type of rubber joint. Tests show that when flexed at an angle of 9 degrees the joint can withstand external water pressures of over 40 feet head. (Illustration.)
The Mono Concrete Co., Ltd.,
Horton-road, West Drayton, Middlesex.

HEATING

'SIMPLICITY' CONVECTION RADIATOR: Designed for commercial and domestic applications in zones where 60 sq. ft. or more of conventional radiators would be used. The 14 in. fan is inclined, allowing the cabinet to be only 12 in. deep. The entire front panel is removable and serves as the air inlet and outlet grille, being subdivided behind the decorative mesh. The heater battery is a large bore lock-seam copper tube, being similar in construction to an automobile radiator. The thermostat is a vapour pressure instrument with the phial located near floor level of the inlet grille. The variable speed fan at the slowest speed has a sound level just above the threshold of human audibility and the output under these conditions is 18,000 BThU/hr with 180°F flow whilst at normal speed the duty is 30,000 BThU/hr. (Illustration.)
Simplicity Heater Co.,
10a Langley-road, Staines, Middlesex.

INSULATION

INSULATING CAVITY WALLS: impervious pvc 'Flovic' film is used to waterproof and insulate cavity and cross walls. The walls can be waterproofed without relying on the cavity which may therefore be filled with low-cost insulating material giving a much higher degree of thermal insulation. There are no fire risks as the pvc does not support combustion and the film is not liable to be punctured during construction. The pvc film is available to the building trade as 'Uflex.' (Illustration.)
Imperial Chemical Industries Ltd.,
ICI House, Millbank, SW1.

OVERSEAS BUILDING

From Our Own Correspondents

BELGIUM. — Du Pont de Nemours, of Belgium, are to erect a new factory for the manufacture of paints and varnishes.

CANADA.—Dominion Glass Co., Ltd., of Montreal, have announced the construction of a $4m. plant at Burnaby, BC. . . . Construction of a 765-acre industrial estate, south east of the junction of the Trans-Canada Highway and No. 2 Highway, is scheduled for this year. . . . The Dominion Bronze and Iron Co. have announced plans for the construction of a new anodizing plant in Fort Garry, Manitoba. . . . A new international airport is to be constructed at Halifax, NS. . . . Construction of a 700-bed provincial hospital is to be started in September, at Calgary, Alberta. . . . An experimental nuclear reactor is to be constructed at the atomic centre at Chalk River. . . . Indecon Corporation, engineers and contractors, of Kansas City, Missouri, are to construct a $15m. steel mill for the Interprovincial Steel Corporation, on a 60-acre site north west of Regina, Saskatchewan. The working area of the new mill will be 180,000 sq. ft. and completion is scheduled for early 1960. . . . Contracts in excess of $1,225,000 have been awarded in Saskatchewan, for the construction of roadways. . . . The Western Canadian Seed Processors Ltd., are to build a $2.7m. plant at Lethbridge, Alberta. . . . The Canadian Pacific Railway have announced the construction of a new terminal in Truro, NS. . . . Construction of the $4m. Hillside Shopping Plaza project, in Victoria, BC, is to be started this summer. . . . The Dominion Construction Co. has been warded a $2.5m. contract to construct a 10-storey office building, in Vancouver, BC, for the Imperial Oil Co. Garibaldi Development Co., Ltd., and A. E. Austen & Co., Ltd., of Vancouver, announce a $5.5m development plan. The project includes a luxury hotel and a six-mile gondola line to the 6,000 ft. level at Garibaldi Park. . . . The Canadian National Railways have announced the expenditure, during the next four years, of $24m. on terminals in the Winnipeg area. . . . Plans have been approved for a combination office and parking building in Toronto, Ontario. The building will comprise a five-storey ramp garage with 54,000 sq. ft. of office space above. . . . The Iron Ore Co. of Canada is to spend $150m. developing iron ore deposits in the Wabush Lake area of Labrador. A certain amount of construction work is envisaged with this project. . . . A six-mile cut-off channel, on the St. Clair River between lakes St. Clair and Huron, is to be constructed shortly. Settlement terms for this project have been arranged by Canada and the US. . . . $8m. is to be spent by the Province of Ontario, in the next two years, on the construction of 41 parks. . . . Constructional additions to oil refinery facilities, of the Imperial Oil Company in Manitoba, are to cost $4.5m. Additions for the North Star Oil Co., a subsidiary, will be $1.6m. . . . A multi-million dollar pulp mill is planned for Fort Saskatchewan. Construction is to start shortly. . . . A $15m. gas cycling plant is to be constructed at Whitecourt, Alberta. This project is undertaken jointly by three oil companies. . . . The Imperial Oil Co. is to construct a $1.4m. asphalt plant at Edmonton, Alberta, and is also completing a $17.3m. expansion to its refinery in Calgary. . . . The BC Electric Co. will spend $22,400,000 this year on the second stage development of Bridge River hydro-electric project. . . . A gas turbine generating plant, costing $2,100,000, is to be completed this year at Port Mann, BC. . . . Richard & B. A. Ryan, of Toronto, have been awarded a contract to construct a three-storey addition to the Sheraton-Brock Hotel at Niagara Falls, Ontario. . . . Construction has begun on a $4m. expansion at British America's gas and sulphur plant at Pincher Creek, Alta. . . . A large industrial project is under consideration, by Swedish interests, for northern British Columbia. . . . Construction will start this summer on three new major Manitoba roads. Path No. 10 from Swan River to Flin Flon; The Simonhouse-Wekusko-road and the Thompson-Wekusko-road. . . . The Province of Mantoba's highway programme for 1959 totals $33m. and is already under way. . . . Army buildings to be constructed at Camp Petawawa, Ontario, are to cost $1,324,000. . . . The new Peace River Bridge, replacing the previous one which collapsed, is to cost $3,269,000.

CEYLON. — The Minister of Industries and Fisheries has presented for the consideration of the Treasury a 10-year development plan for the fisheries industry which would include mechanisation, the provision of fisheries harbours, boatbuilding yards and cold storage and ice-making plant. The plan is based on a report submitted by Japanese experts who came to Ceylon under the Colombo Plan last year and would, if implemented, cost an estimated Rs. 345m. . . . Ceylon is expected to sign an agreement with the USSR under the economic agreement between the two countries for preliminary survey work to begin on a motor car tyre and tube factory.

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CHILE.—An application from the Compania Celulosa Chile SA to the Government Planning Department requests support in obtaining loan of US $14.5m. to enable the company to establish a cellulose mill in the Concepcion area. The total value of the project is said to be in the region of US $24m. . . . Support is also being sought by Industriales Forestales SA for a loan to build a mill to produce 40,000 tons of newsprint per annum and from Cholguan SA for a loan for a mill to produce 70,000 tons or raw cellulose per annum. . . . The Minister of Public Works has announced that the US Development Loan Fund is to provide a loan of US $7m. to finance the initial studies and works connected with the construction of the new international airport at Pudahuel. The grant of the loan is dependent upon the Ministry of Public Works producing plans drawn up by internationally known construction companies. The company whose plans are finally approved will be granted the contract to supervise construction. . . . The President of the American Construction and Design Company of Seattle, USA visited Chilean fishing ports during February to study the possibility of establishing a shipyard in Chile to produce up to 200 small fishing boats a year.

COLOMBIA. — It is reported that the Municipality of Manizales is negotiating for a loan of one million pesos from the proceeds of sales of US surplus agricultural products for the construction of a modern milk plant. . . . The Municipality of Bogota is seeking a guarantee from the Bank of the Republic to enable it to obtain a loan from private US sources of 20 million dollars for various projects including extension of the main drainage system, the disposal of refuse and completion of the city road plan. It is reported that an offer has been received from abroad for another loan of US $30m. for the construction of a 45,000 kW electric plant for Bogota. It is believed that the Colombian Government will seek a new loan from the International Bank for highways.

DOMINICAN REPUBLIC. — Various buildings and monuments are to be constructed by the Dominican Government in connection with celebrations to mark the first centenary of the restoration of the country's independence in 1963. Competitions for the designs of these are likely to be open to architects of other countries. An extensive programme of public works is also included in this scheme.

DOMINICAN REPUBLIC. — The Government has announced an important building development in Santiago de los Caballeros. This will consist of a women's college, a school of arts and crafts, a children's hospital, a home for orphans and nursery school and a Carmelite convent. The above will form an educational centre for the Cibao area. Other works announced for the city include a cattle fair-ground. Housing developments in the outer suburbs are planned to take the place of sub-standard dwellings. The six major works above will cost a total of $3m.

'The Builder' in Durban

DURBAN Chamber of Commerce has sought and been granted permission to circulate photostatic copies of articles from *The Builder* of special interest to its members. The weekly copy of the newspaper will con-

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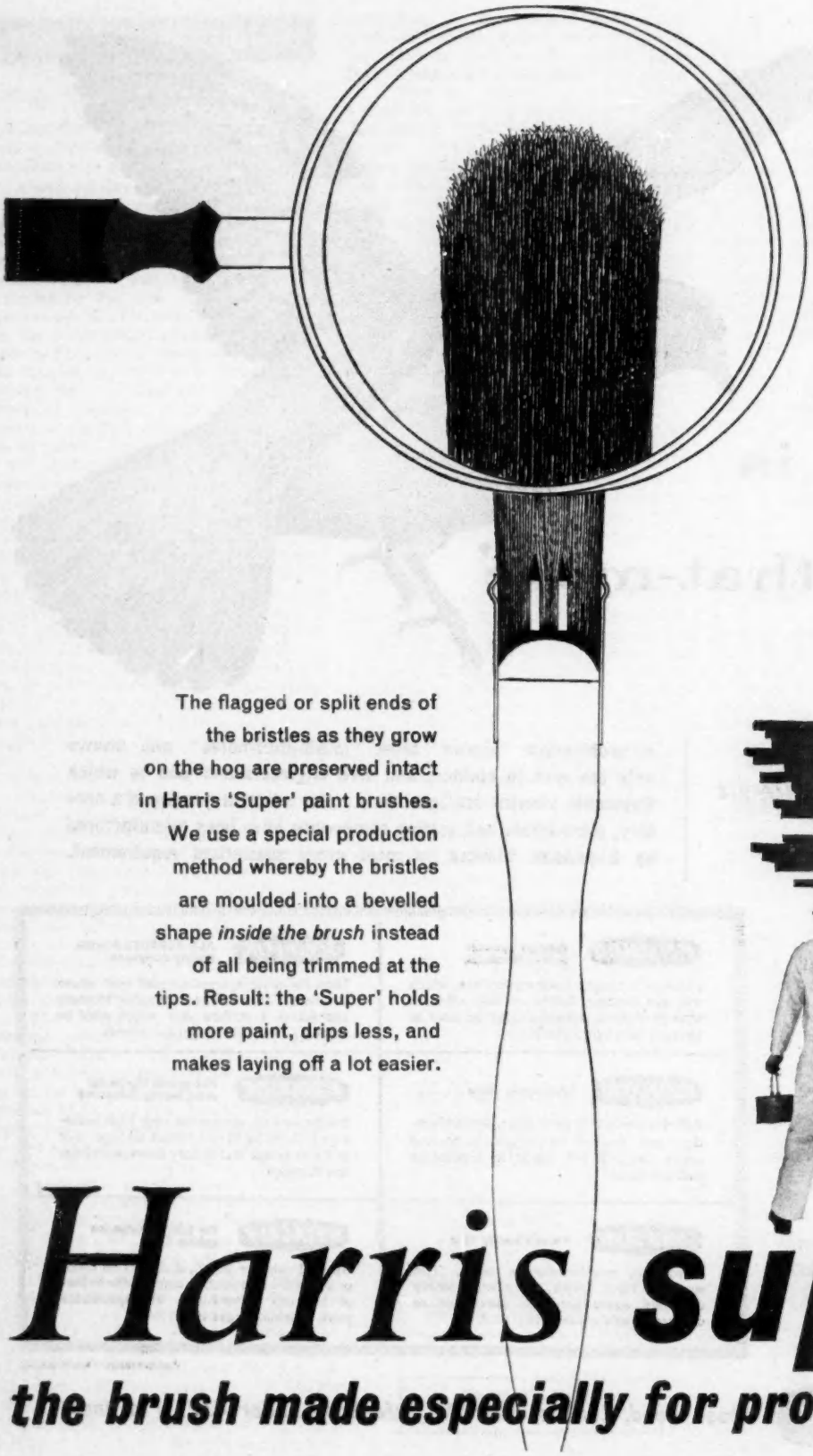

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tinue to be available for consultation by members at the Chamber offices, South British Building, Field-street, Durban, Natal, South Africa.

£20 m. Nuclear Station for Japan

THE General Electric Company Limited of England is to build Japan's first nuclear power station. Negotiations with the company for the supply of a 150 mW nuclear station to be built at Tokai-Mura, about 70 miles north-east of Tokyo have been satisfactorily concluded. It is expected that the final details of the contract, the value of which will be approaching £20m., will be settled later in the year. The station will take approximately four years to build and is expected to be in full operation in 1963.

Review of Canada's Housing Needs

BY 1958, Canada's housing shortage had been reduced to the lowest proportion in at least 30 years, says The Bank of Nova Scotia in its current Monthly Review 'Housing—Time to Take Stock.' And since most of the people now marrying were born in the '30s when birth rates were low, the physical pressures on housing should not be intense for the next few years.

But, the Review emphasises, although the housing situation has improved, there are no grounds for complacency. At least a third of Canadian families are below the income level needed to buy a new house, and probably half a million of them are living in housing conditions which may fairly be described as poor. Many of the houses now standing are approaching the end of their life expectancy. By 1980 one million houses will be more than 75 years old, and another million will be between 50 and 75 years.

Before long a new generation, which made its first appearance as the bumper baby crop in the late '40s and is now crowding its way through the schools, will be marrying and seeking independent accommodation, the Review continues. A study prepared for the Gordon Commission estimated that between 1955 and 1980 the housing stock might have to be almost doubled, and that most of the growth would occur in towns and cities. To those who have watched the face of the country changing over the post-war period, this prospect is at once alarming and challenging.

Canadians clearly prefer single-family dwellings which made up about two-thirds of occupied units at the time of the 1951 Census and have accounted for about 70 per cent of new construction since then. The outstanding exception to this pattern is Montreal, where in 1951 90 per cent of dwellings were multiple units, but even there single-family houses are becoming more popular. Apartment blocks, of course, are most common in the large cities, especially Montreal and Toronto.

What will determine the direction and arrangement of new building? It has been suggested that in the foreseeable future there will be regional cities in continuous strips across whole stretches of the continent. Such a city is already solidifying along the northern shore of Lake Ontario, from Oshawa to beyond Hamilton. The severe financial strain experienced by municipalities in the path of new development has brought a new emphasis on community planning. In the past, planning usually involved setting up separate advisory bodies of laymen, but since 1950 some rapidly growing communities such as Edmonton and Vancouver have been finding that they need a different kind of planning body, a sort of staff intelligence unit to serve a board of city department heads.

Other questions which will require increasing attention are those of conserving the existing housing stock, and of redeveloping areas which are really 'blighted,' where housing is no longer fit for habitation. Social problems coupled with physical deterioration mean that slums are an ever-increasing drain on the public purse, and to recapture the land so that it may become once again a healthy part of the city demands large-scale financing.

In 1956 the National Housing Act was amended to broaden the federal Government's participation in urban redevelopment and since then 18 redevelopment studies have been undertaken across Canada with redevelopment projects actually under way in five cities. As this programme gathers steam the provincial governments are also showing interest.

SCOTTISH BUILDING TRADE WAGES

FOLLOWING are rates of wages authorised by the Scottish National Joint Council as from February 2, 1959. They apply to the whole of Scotland, including the islands of Orkney, Shetland, etc.

Grade A: Craftsmen, 4s. 9d.; Labourers, 4s. 2½d.

For apprentices, the rates are:

Year	Percentage of Craftsman's rate	For week of 44 hours s. d.
1st	25	52 3
2nd	33⅓	69 8
3rd	50	104 6
4th	66⅔	139 4
5th	75	156 9

For female labour, the rates are:

	s. d.
Operatives on craft operations (at end of probationary period)	4 2½
Operatives on labouring operations (at end of probationary period)	3 8½

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The SCOTTISH BUILDER

Glasgow College Extension

A £1M. EXTENSION scheme to the Royal College of Science and Technology, Glasgow, will be phased over the next four years. Agreement has been reached with the University Grants Committee for building work to be undertaken at the rate of £250,000 a year, commencing in 1960. The programme comprises a block for chemistry and chemical technology, and the completion of the Montrose-street engineering extension where it joins Cathedral-street.

London Editor to Visit Scotland

FOLLOWING in the footsteps of a one-time president of the National Federation, Mr. Leslie Wallis, and at least two former LMBA presidents, the late E. W. Garrett and Mr. Woodbine Parish, Mr. Ian M. Leslie, OBE, JP, editor of *The Builder*, is visiting Scotland next month at the invitations of the Rotary Clubs of Edinburgh and Glasgow. He will address the Glasgow Club on May 12 on 'Building in the Next Ten Years' and the Edinburgh Club on May 14 on 'Architecture in the Next Ten Years.'

Mr. Stanley Farrow was to have visited the Edinburgh and Glasgow Rotary Clubs last year while he was President of the LMBA, but was prevented from doing so by pressure of official engagements in London. He addressed the London Club instead.

NEW BUILDINGS

Dundee.—Town Planning Comm. approval for 30 shops, dance hall-restaurant unit, garage, lock-ups, and light industrial building with car parks at Bullar's Loan subject to submission of detailed plans. Applicants are C. Gray (Builders), Ltd.

Dundee.—SSHA given permission by Planning Comm. for 94 houses at Camperdown-rd.

Edinburgh.—EC approved plans for Napier Technical College est. at £1m. Plans to be submitted to Scottish Education Dept.

Edinburgh.—EC approved plans for St. Crispin's Special sch. at West Mains at a cost of £52,571.

Falkirk.—Dean of Guild Court permission given to TC for 81 3-apt. houses at North Bantaskine. Est. cost £130,064.

Glasgow.—Tenders invited for several works in connection with proposed Stow College, Cathedral-st., an 8-storey building of r.c. construction. Applications to City A and Planning Officer, 20 Trongate, Glasgow C1.

Islay.—Strengthening of airport runway. Est. cost £128,000.

Kirkwall.—Extension and strengthening of runway. Est. cost £201,000.

Lanark CC.—Contract for 82 houses at Crawford Dyke, Carluke, awarded to Atholl Houses Ltd., Glasgow, for £111,079.

Paisley.—Dean of Guild Court approved plans by J. Robertson and Sons, Ltd., for office building at Stevenson-st. Est. cost £30,000.

Perth.—TC accepted offer by Whatling's Ltd. for reconstruction of Victoria Bridge over the River Tay. The firm's offer to do the work over a period of 14 months is £151,920. Over 18 months the figure was £147,495.

Renfrew.—Extension of new airport terminal building. Est. cost £192,000.

Turnhouse.—Extension of airport terminal building and apron. Est. cost £180,000.

The Builder

FUTURE CONSTRUCTION

Full details of Public Appointments open will be found in the Advertisement pages of this and previous issues

CONTRACTS OPEN

For some contracts still open but not included in this list, see previous issues. Those with an asterisk are advertised in this number. The latest date for the receipt of tenders or applications appears above each paragraph. A dagger (†) against the entry indicates that applications must be received by this date.

BUILDING

APRIL 29

***†Birmingham City C.**—Fixed price tenders for three houses and shop at Cross Farm-rd., Harborne. City A. Dep. £2 2s. Tenders by May 29.

APRIL 30

***†Bristol City C.**—Fixed price tenders for four houses at Whiteway-close, Whiteway-rd., St. George. City A. Dep. £2 2s.

†Castlederg, Co. Tyrone, RDC.—Fixed price tenders for new Council offices, boardroom, garages and stores, with roads and sewers. C.

MAY 1

***†Bedford BC.**—32 dwellings with ancillary work at Brickhill estate. Boro' E&S. Dep. £3 3s.

***†Dudley CBC.**—Fixed price tenders for 24 flats at Salon-st. Boro' A. Dep. £2 2s.

MAY 2

Clare RDC.—16 dwellings at Clare, also roadworks, two dwellings at Ousden, four at Hundon, four at Kedington and three at Withersfield. E&S. Dep. £2 2s. per site.

MAY 4

***†Barking Corpn.**—Flats at Westbury-rd (£30,000 est.). Boro' A. Dep. £5 5s.

***Cwmbran UDC.**—31 houses at Lightwood site, Oakfield-rd. A. Dep. £2 2s.

***†Leicester CC.**—Inclusion in list of contractors to tender for completion of the erection of Coalville proposed grammar sch. County A. Tenders by May 28.

***†Winchester City C.**—Six shops, three flats and two houses at Garbett-rd., Winnall estate. QS: A. S. Wilson & Ptnrs., 8 Storey's Gate, SW1. Dep. £2 2s.

MAY 5

***†Rotherham CBC.**—138 houses and 56 garages at Kimberworth Park estate. Boro' E. Dep. £5 5s.

MAY 6

***†Durham CC.**—New branch library at Seaham Harbour. County A.

***†Leeds Regional Hospital Bd.**—Fixed price tenders for alterations to boiler house, etc., at St. John's Hospital, Goole. A to Bd. Dep. £2 2s.

***†Norfolk EC.**—Caretaker's bungalow at County Technical College, King's Lynn. Chief Education Officer, Stracey-rd., Norwich.

***†Southampton CBC.**—(a) 26 old people's flats and four houses at Brownhill house. (b) Houses at Coxford close. (c) 84 flats at Thornhill (Section 2B). Boro' E.

***†Wandsworth MBC.**—33 flats and houses at West Hill. TC.

MAY 7

***†Oundle and Thrapston RDC.**—42 dwellings at Nassington and King's Cliffe. A: H. G. Kenyon (L), Council Offices. Dep. £4 4s.

MAY 8

***Heston and Isleworth BC.**—Scullery at Wellington jun. sch. Boro' E&S.

***†Rotherham CBC.**—Crematorium at East Herringthorpe cemetery. Boro' E. Dept. £5 5s.

MAY 11

***Bingley UDC.**—(a) Eight flats at Queens-rd., Crossflatts. (b) Eight flats at Wilsden. (c) Four flats at Cullingworth. S&A. Dep. £2 2s.

Hambledon RDC.—17 dwellings at Chapel-la., Milford. Boro' E&S. Dep. £3 3s.

***†Swansea CBC.**—94 dwellings on seven slum clearance sites at Landore and Plasmarl area. Boro' A. Dep. £2.

MAY 12

Hinckley UDC.—Omnibus station at Lancaster-rd. E&S. Dep. £2.

MAY 13

***Essex CC.**—Fixed price tenders for alterations and additions to cottage and farm buildings at Coldhams farm, Clavering, nr. Saffron Walden. County Land Agent and Valuer, 69 Duke-st., Chelmsford.

***Morecambe and Heysham BC.**—26 aged people's flats at Heysham House estate. Boro' E&S. Dep. £2.

MAY 14

***†Cheshunt UDC.**—38 dwellings on Grovehse. site. C. Tenders by June 18.

***Havant and Waterloo UDC.**—Fixed price tenders for (a) six r.c. garages at Havant depot; (b) one r.c. garage and material bays at Fishery-la. depot, Hayling Island, and (c) one r.c. garage, mess hut and convenience with sanitary fittings and plumbing and material bays at Waterlooville depot, Hulbert-rd. E&S.

MAY 15

***Barnstaple BC.**—(1) 10 old people's dwellings; (2) 14 houses; (3) 6 houses; (4) 10 houses, and (5) 12 houses at Zephyr estate. Boro' S. Dep. £2 2s.

***Dagenham BC.**—Nine old persons' bungalows at Kenneth-rd. Boro' S. Dep. £2 2s.

MAY 16

***Ripley UDC.**—14 houses at Cedar-ave. S. Dep. £2 2s.

MAY 18

Shrewsbury BC.—Fixed price tenders for 50 dwellings at Harlescott Grange estate. Boro' S. Dep. £2 2s.

MAY 19

***Rochester City C.**—Four old persons' bungalows at Lynors-ave., Strood. City S. Dep. £2 2s.

***Whiston RDC.**—10 aged persons' bungalows at Burrows-la., St. Helens-rd. Eccleston Lane Ends. E&S.

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MAY 20

***Lindsey CC.**—Hostel at Riseholme Farm Institute, nr. Lincoln. County A. Dep. £3 3s.

***Salford City C.**—Fixed price tenders for proposed Fernhill sch. at Chaseley-rd., Pendleton, Salford, 6. A: R. Byrom (A), 9 Victoria-bldgs., Silver-st., Bury. Dep. £3 3s.

MAY 21

***Ealing BC.**—Fixed price tenders for (a) conversion of No. 64 Hanger-la., into five flats, and (b) erection of 34 flats at Lime Trees estate, Northolt. Boro' E. Dep. £5 each.

MAY 22

***Great Yarmouth CBC.**—Assembly hall, kitchen, etc., at grammar sch., Salisbury-rd. A: F. Jackson (A), 22 Euston-rd. Dep. £2 2s.

Birmingham City C.—Firm price tenders for 15 two-storey dwellings and 26 garages at Field-la., Bartley Green estate. City A. Dep. £2 2s.

***Great Yarmouth CBC.**—Fixed price tenders for (a) 24 aged persons' bungalows, warden's and communal unit, with sundry site works, at Magdalen college estate, Gorleston, and (b) central heating and domestic hot water installation for the above. Boro' E. Dep. £2 2s. each contract.

***Reigate BC.**—Fixed price tenders for 36 flats, outbuildings and 15 garages at the Dome estate, Redhill. Boro' E&S. Dep. £2 2s.

***Stourbridge BC.**—56 flats and 64 houses, with incidental works, at Rufford estate. Boro' E&S. Dep. £3 3s.

***Walthamstow BC.**—Five shops and six maisonettes and 15 garages at Wood-st. Boro' A. E&S. Dep. £2 2s.

***Walthamstow BC.**—16 flats and five garages at Parkstone-rd. and Wyatts-la., E17. Boro' A. E&S. Dep. £2 2s.

MAY 25

***Brighton CBC.**—Fixed price tenders for three children's homes at Hollingdean, Lower Bevendean and South Woodingdean estates. Boro' S, E and Planning Officer. Dep. £2 2s.

***Chichester City C.**—Fixed price tenders for 44 bed-sitting room flatlets at St. Pancras. City E&S. Dep. £2 2s.

***Chingford BC.**—40 houses at Hawkwood-cres. Boro' E. Dep. £2 2s.

***Ealing BC.**—Fixed price tenders for slipper baths at South Ealing. Boro' S. Dep. £5.

Eastleigh BC.—22 dwellings at Nelmore estate. Boro' E&S. Dep. £2 2s.

JUNE 1

***Brighton CBC.**—Conversion of 'Elm Cottage,' Warren Farm, into home for 30 aged and infirm women. Boro' S. Dept. £2 2s.

JUNE 6

***East Barnet UDC.**—Fixed price tenders for 65 dwellings and eight garages at Pine-rd. development area, N11. E&S. Dep. £2 2s.

JUNE 15

***Bucks CC.**—New jun. sch. at Tring-rd., Aylesbury. County A.

NO DATE

***University of Southampton.**—Dormitory and communal accommodation at School of Navigation, Warsash (Est. cost £210,000). A: Richard Sheppard, Robson & Ptnrs. (F/A), 5 Southampton-pl., London, WC1.

SERVICES, PAINTING, MATERIALS, ETC.

APRIL 29

***†Leeds Regional Hospital Bd.**—Fixed price tenders for (a) heating, H.W.S., steam and condense, gas, piped medical gas and ventilation installation; (b) electrical installation at Thoracic centre, Killingbeck hospital, York-rd. A to Bd. Dep. £2 2s. (each contract). Tenders by May 27.

MAY 1

***†Bournemouth CBC.**—Fixed price tenders for copper roofing at Redhill fire station. Boro' A. Tenders by May 15.

MAY 2

***†Wrexham BC.**—(a) Terrazo; (b) armourplate doors and screens; (c) sliding, folding screen; (d) bronze balustrade and council chamber rail; (e) plumbing and fire hoses; (f) electrical installation; (g) ironmongery; (h) strong room doors; (i) joinery fittings, counter to treasurer's office, benches, etc., and (j) lantern window to council chamber for proposed new Guildhall. Stephenson, Young & Ptnrs, 6 Bluecoat-chmbrs., Liverpool.

MAY 4

***†Halifax CB.**—(1) Ironmonery and (2) sanitary fittings to 54 flats at Brunswick-st. Boro' E.

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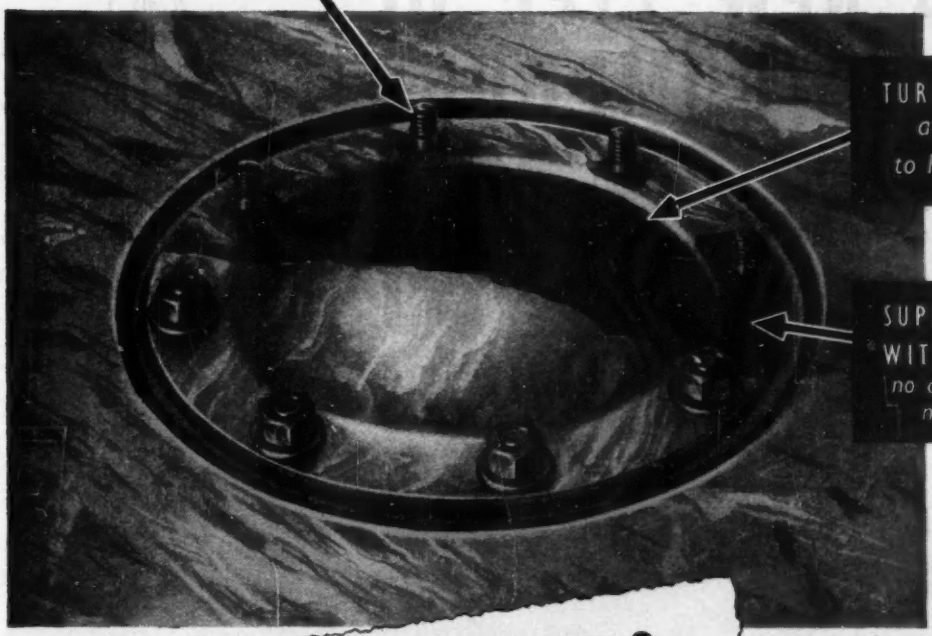

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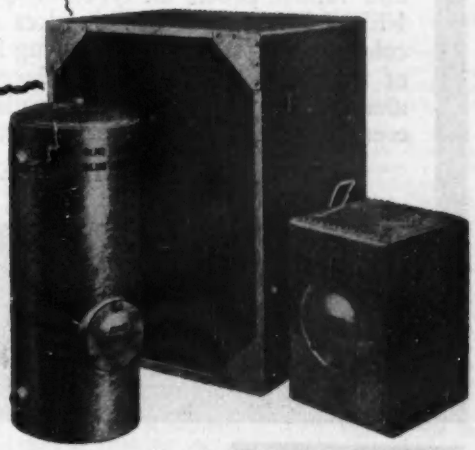

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DHB/7991

MAY 5

***†Leeds Regional Hospital Bd.**—Fixed price tenders for alterations to sluices, etc., at Lynfield Mount Hospital, Bradford. A to Bd. Dep. £2 2s.

MAY 7

***Rickmansworth UDC.**—External painting and incidental repairs to 315 houses at various sites. E&S. Dep. £2 2s.

MAY 8

***†Swansea CBC.**—(1) Heating, hot and cold water services, and (b) electrical installation to Dynevor county sec. sch. for boys. Boro' A. Dep. £2.

MAY 9

***†Malden and Coombe BC.**—External decorations to properties. Boro' E&S.

MAY 12

***Sunderland CBC.**—Internal painting, etc., at various schools. Director of Education, 15 John-st.

MAY 26

***Birmingham Tame & Rea District Drainage Bd.**—Repairs to roofs of 28 houses at Minworth, Sutton Coldfield. E.

JUNE 8

***Wallasey CBC.**—Internal painting of various schools. Boro' A.

MUNICIPAL AND CIVIL ENGINEERING WORKS, ETC.

APRIL 30

†Mere and Tisbury RDC.—Comprehensive scheme of water supply within 21 parishes of the district including 36 miles of water mains and construction of two small reservoirs. T. Ward Whitfield & Son, constg. engrs., 54 Stallard-st., Trowbridge, Wilts. Dep. £5 5s.

MAY 8

Oundle UDC.—One mile 9 in. dia. a.c. water main with ancillary works. Pick, Everard, Keay and Gimson, constg. engrs., 6 Millstone-la., Leicester. Dep. £3 3s.

MAY 9

Newry, NI, UDC.—New roadway over Newry Canal at intersection of Sugar Island and Merchants Quay. Town S., Council Offices, Town Hall, Newry. Dep. £5 5s.

MAY 11

Aylesbury BC.—Fixed-price tenders for construction of pumping station. Boro' E&S. Dep. £2 2s.

Coalville UDC.—6 800 super. yd. carriageway, 800 l.in. yd. sewers at Greenhill housing estate. E&S. Dep. £3 3s.

Guildford RDC.—3,200 super yd. concrete carriageway; 230yd. 6in. soil sewer; 860yd. 9-18in. SW sewers with manholes; construction of r.c. ejector station; extension to sewage disposal works, etc., at Almsgate housing site extension. E&S. £2 2s.

Hambledon RDC.—Sewage pumping station with 1,072yd. 6in. s.i. rising main; 2,841yd. 6in. and 9in dia. s.i. sewers; 3,740yd. 6in. stoneware sewer with manholes, etc. E., Dep. £5 5s.

Maynooth, RI.—Livestock mart for Irish Attested Sales, Ltd.: (1) Sales ring, offices and storage area; (2) re-erection of hangar, 100ft. x 170ft., and (3) tubular steel penning. A: Oisin J. Gray, 8 Oaklands-dr., Ballsbridge, Co. Dublin. Dep. £10.

Norton Radstock UDC.—3,500yd. 9in. s.i. mains. Harvey, McGill & Hayes, constg. engrs., 38 Market-pl., Chippenham. Dep. £5.

JUNE 16

Ministry of Transport and Civil Aviation.—Construction part of approach road to Dartford Tunnel including 1,000ft. r.c. viaduct, precast prestressed deck to crossing over railway and various other works. Mott, Hay & Anderson, 9 Iddesleigh-hse., Caxton-st., London, SW1. Dep. £50.

GENERAL BUILDING WORK

(LONDON)

Bermondsey.—MAISONETTES.—The Housing, TP and Estates Com. has approved layout and sketch plans for one four-storey block of 16 maisonettes and three eight-storey blocks of 32 maisonettes (with lifts), together with 26 garages, 52 tenants' stores, a children's playground, etc., on the Abbey-st. (North) site, Phase III, bounded by Abbey-st., Maltby-st., Millstream-rd., the railway viaduct and Gedling-pl. The Council's appointed architect is William Ryder (A), AMTPI, 67/68 Jermyn-st., SW1.

'THE BUILDER' PRICES

Until further notice, 'The Builder' Current Prices of Materials section will appear in the first issue of each month only. The 'Measured Prices for New Building Work in London' feature will appear in the second issue of each month. Alterations in materials prices noted since April 17 are as follows :—

	£	s.	d.		£	s.	d.
Moler mortar powder				Per cwt.			
	1	6	0	—		3	0
Best blue pressed Staffordshire bricks (sites) ...				Per 1,000			
	30	6	0	+		3	0
do. Bullnose (sites)	30	18	0	+			6
Blue wire cuts ...	27	0	6	+		1	0
2½ in. moler flue bricks (sites) ...	29	0	0	—	4	10	0
2½ in. machine-made sandfaced red facings (sites)	16	6	6	—		4	6
2½ in. machine-made multi red facings (sites) ...	16	11	6	—		4	6
2½ in. hand-made sandfaced red facings (sites) ...	16	18	6	+		2	6
2½ in. hand-made sandfaced multi-colour facings (sites)	17	8	6	—		2	6
Clinker concrete partition slabs :				Per yd. sup.			
2 in.		3	9	+			3
2½ in.... ...		4	4	+			2
3 in.		5	3	+			5
4 in.		6	5	+			3
Moler partition blocks :							
2 in.		10	6	—		4	6
2½ in.... ...		13	0	—		2	3
3 in.		14	0	—		1	6
4 in.		15	6	—		3	6
Copper tubes and sheets :				Per lb.			
Tubes, basic price ...			26½	—			1½
				Per ton			
Sheets, basic price ...	259	5	0	—20	15	0	
Brass tubes, basic price				Per lb.			
		1	9½	—			1½

Camberwell.—APPOINTMENTS.—The Building Development Com. has appointed Charles Weiss & Ptnrs. as consulting engineers in connection with the redevelopment of the Mansion-st./Wesson-sq. development area and has authorised the employment of J. A. Storey & Ptnrs. to make a survey of the site.

Chelsea.—HOME FOR AGED PERSONS.—Preliminary plans are being prepared for a home for old people on part of the site of 367 Fulham-rd. for the LCC. The Welfare Com. proposes the appointment of a firm of engineering consultants for the design and supervision of the engineering services.

Hackney.—APPOINTMENT.—The TP Com. of the LCC recommends the appointment of F. R. Bullen & Ptnrs., engineering consultants for stage I of the Temple Mills Bridge reconstruction, as engineering consultants for the second stage and for associated works on behalf of the Lee Conservancy Bd. The work includes the construction of a new bridge to the north to carry eastbound traffic and additional works attributable to the widening of the river. The total cost of the whole scheme is now estimated at about £240,000.

Hackney.—MAISONETTES, FLATS AND GARAGES.—The Housing and TP Com. proposes the development of the Cazenove-rd. (No. 2) housing site, bounded generally by Cazenove-rd., Alkham-rd. and the railway including the two temporary bungalow sites fronting Cazenove-rd. and Alkham-rd., by 124 dwellings in one 12-storey block of flats, one six-storey block of flats, three four-storey blocks of maisonettes and one three-storey block of flats, with meeting room, estate office, tenants' and porters' workshops, and 31 garages. The estimated cost of the building work, including fees, is £322,275. The Boro' E&S and Director of Housing is G. L. A. Downing, OBE, MICE.

Hampstead.—APPOINTMENT.—The Housing Com. recommends the appointment of Chesterton & Sons, 34 Kensington-sq., W8, to prepare a structural survey of the 168 properties to be acquired on the Eyre estate, to report on the possibility of converting the premises into self-contained units and to submit general advice as to the future of the estate.

Hampstead.—APPOINTMENT.—The Housing Com. recommends the appointment of Buenfeld & Isitt, Mayfield-rd., Herne Bay, to carry out a complete survey of the Fleet-rd. area, now acquired by the BC, preparatory to deciding the most suitable form of redevelopment for the area. The Council's Housing Architect is C. E. Jacob (A).

Islington.—MAISONETTES AND FLATS.—The Housing Com. has approved layout plans prepared by Messrs. E. C. P. Monson for the redevelopment of the site of 26, 27 and 28 Florence-st. by three maisonettes and six flats and recommends the negotiation of a contract for the work with Rowley Bros., Ltd. The quantity surveyors are Messrs. O. E. Parratt.

Lambeth.—COUNTY HALL EXTENSION.—The Establishment Com. of the LCC has approved a scheme for the extension of the south block of the County Hall on the Westminster Bridge-rd. frontage to provide accommodation for 312 staff and space for the reinstatement of a restaurant for J. Lyons & Co., Ltd. The estimated cost is £395,300. The Com. has also approved proposals for the improvement of the Belvedere-rd. courtyard, to provide parking space for 100 more cars at a cost of £48,400.

Walthamstow.—FLATS, MAISONETTES AND GARAGES.—The Reconstruction and Housing Com. has approved schemes submitted by the Boro' Architect, E&S, F. G. Southgate (A), MIMunE, AMTPI, for the redevelopment of the West-st. and St. Stephen's-rd. site by 40 flats, 34 maisonettes and 16 garages, and of the Parkstone-rd. and Wyatts-la. site by 16 one-bedroom flats and five garages.

Woolwich.—HOME FOR AGED PERSONS.—The Welfare Com. of the LCC has approved plans for a home for old people at Greenlaw-st., providing for a partly single-storey and partly two-storey building arranged round three courtyards. Accommodation will be provided for 66 persons with a flat for the matron and bed-sitting rooms for three other resident staff. The estimated cost of the work is £93,622, including £8,103 for abnormal site works.

(PROVINCIAL)

Bishop Auckland.—UDC submitted outline proposals to County Planning Officer for new swimming baths to cost £140,000. Council's S: J. Ford, Bondgate, Bishop Auckland.

Colwyn Bay.—Welsh Regional Hospital Bd. considering scheme for new base hospital to serve the Clwyd and Deeside Hospital area, £1m. est.

Doncaster.—RDC propose erection of 580 houses at Kirk Sandall.

Gateshead.—EC appointed Davis, Belfield & Everest, 29 Cabinet-chbrs., Leeds, 1, as QS for proposed £237,000 Heathfield grammar sch. Boro' E: G. F. Winters, Municipal-bldgs., Gateshead.

Gateshead.—North-Eastern Trading Estates, Ltd., Team Valley Trading Estates, Gateshead, have announced that 15 more factory extension schemes are proposed in the North-East.

Glossop.—Manchester TC to erect 290 houses in Hadfield-rd. and Chapel-la. areas.

Hyde.—Cheshire EC proposes new College of Further Education.

Keighley.—TC proposes 82 dwellings at Low Bank-la., Oakworth.

Leeds.—Regional Hospital Bd. propose extensions to operating theatres and new physiotherapy department at St. James Hospital, £290,000 est.

North Shields—Hodges-Brown & Co., Ltd., engineers, etc., 25 Trafalgar-st., Newcastle-on-Tyne, to erect machine and fabricating shop, offices, and storage accommodation on 6½-acre site at Wallsend-rd., Percy Main. Firm have prepared own plans.

Sunderland.—TC to spend £126,000 on preparation of three sites, covering 20 acres of land, for proposed industrial development. Boro' E: T. Donkin, 27 Fawcett-st.

Sunderland.—Corporation Finance Committee decided to offer no objection to £452,000 scheme for construction of inner ring road to relieve traffic congestion in main thoroughfares. Boro' E: T. Donkin, 27 Fawcett-st.

Worcestershire.—EC approved £1,520,000 school building programme for 1960-62.

TENDERS

* Denotes *accepted*.
† Denotes *provisionally accepted*.
‡ Denotes *recommended for acceptance*.
§ Denotes *accepted subject to modification*.
¶ Denotes *accepted by H.M. Government Departments*.

Barnsley.—100 dwellings for BC. *Harlow & Milner, Ltd., Warren Yard, Warrengate, Wakefield. £119,810.

Bebington.—124 houses and 38 garages at Mill Park estate, Eastham, for TC. *Lloyd & Cross, Ltd., Port Causeway, Bromborough. £176,353.

Bedlington.—19 shops and 7 flats at Guide Post for UDC. S: A. K. Dennis, Council Offices, Bedlington. *J. Dodds & Son, Dark-la., Morpeth.

Bexley.—Bexley/Erith new tech. sch. for boys, Hartford-rd., for BC. A: Dowton & Hurst (F), 10 Portman-st., W1. QS: C. John Mann & Son, 25 Bedford-row, WC1.

Walter Lilly & Co., Ltd.	£193,336
G. E. Wallis, Ltd.	189,247
Marshall Andrew, Ltd.	189,142
J. & R. Rooff, Ltd.	188,296
Simms Sons & Cooke, Ltd.	187,141
Galbraith Bros., Ltd.	186,324
Thomas & Edge, Ltd.	185,730
Henry Kent, Ltd.	183,791

Birkenhead.—Following for BC:—120 flats at Mersey Mount. *Wm. Thornton & Sons, Ltd., Liverpool. £237,799.—106 dwellings at Woodchurch estate. *Thos. Warrington & Sons, Ltd., Ellesmere Port. £174,586.—42 dwellings at Grosvenor-st. *Geo. Wimpey & Co., Ltd., London. £82,569.—Alterations and additions at Park High School for Girls for EC. *F. Clark & Sons, Ltd., 191 Heyworth-st., Liverpool. £77,642.

Bollington.—Renovation works at Methodist Church. *H. Cumberbirch, Ltd., High-st., Bollington, Cheshire.

Bootle.—196 dwellings at Sterrix-la. site for TC. *Direct labour.

Border.—21 houses at Longton for RDC. *John Laing & Sons, Ltd., Dalston-rd., Carlisle.

Bury St. Edmunds.—(a) Eight old people's flats at Linnet-rd.; (b) 28 houses at Greene-rd. and Willcox-ave. Boro' E&S: George S. Standley, AMICE, MIMun E, Regd. Architect. QS. G. A. Lewis, FRICS, Cambridge. *Direct labour. (a) £9,031; (b) £39,472.

Carlisle.—Contracts placed by City C March 6-April 3 (subject to Ministerial consent and loan sanction):—River Eden abstraction scheme: water treatment works. *J. Laing & Son, Ltd., Carlisle. £32,760.—4 shops and flats (Block No. 1), Newlaithes-ave., Morton estate. *J. Laing & Son, Ltd., Carlisle. £18,028.—50 houses at Morton estate. *Direct labour. £65,093.

Carlisle.—Four shops and flats at Morton estate for City C. City E: L. J. A. Stow, 18 Fisher-st. *John Laing & Son, Dalston-rd., Carlisle. £18,027.

Chertsey.—24 flats at 'Collingsbourne,' High-st., Addleston, with outhouses, six garages, paths, drains, sewers and demolition of existing buildings for UDC. E&S: W. V. Davies. QS: E. C. Harris & Ptnrs. *E. Clarke & Sons (Addlestone) Ltd. £36,236.

Chorley.—24 houses, 8 flats and 9 garages at Clayton Woods, Hoghton, for RDC. *J. & H. Bullough (Contractors), Ltd., Chorley. £48,514.

Congleton.—40 houses and 10 bungalows at Buglawton for T.C. *Shentons, Ltd., Stoke-on-Trent, and J. T. Yearsley & Co., Ltd., Congleton.

Coventry.—Second instalment of Foxford sec. sch. for EC. *Thos. Bates & Son, Ltd., 53 Warwick-st., Coventry. £178,189.

Cumberland.—New sec. sch. at Distington for CC. *John Laing & Son, Ltd., Dalston-rd., Carlisle.

Darlaston.—8 bungalows at Churchill-rd. and 16 flatlets at Wilkes-ave. for UDC. *D. B. Evans (Bilston), Ltd., Oxford-st., Bilston. £29,392.

Darlington.—Erection of police station for Durham CC. County A: G. R. Clayton (F), South-st., Durham. *Wigham & Son, Shepherd-terr., Hylton, Sunderland.

Derby.—152 houses at Boulton estate for BC. *Direct labour. £202,000.

Dudley.—126 flats and 25 garages—Wren's Nest redevelopment for CBC. Boro' A. QS: E. J. Gard, Dudley. *Henry Boot & Sons, Ltd., Pheasey estate, Great Barr, Birmingham. £190,256.

Eston.—Swimming baths at South Bank for UDC. A: J. G. L. Poulson (L), 54 Albert-rd., Middlesbrough. *C. Tennet (Builders), Ltd., Church-rd., Stockton-on-Tees. £153,554.

Gateshead.—Headquarters offices (95,000 sq. ft.) on Team Valley trading estate for Durham Divisional Coal Bd. Plans by Bd.'s A Dept., 24 The Side, Newcastle-on-Tyne. *Leslie & Co., Woodland-rd., Darlington. £400,000.

Gosforth (Northumberland).—42 houses at Grange-la. estate for UDC. S: C. Wyld. *A. R. Robertson (Builders), Ltd., East Park View, Blyth. £60,176.

Hackney.—Six maisonettes, four flats and six garages at Cassland-rd. housing site for MBC.

	Fluctuating	Fixed price
Demolition & Construction Co., Ltd.	£35,622	£35,822
W. Silk & Son, Ltd.	35,400	35,541
W. Loweth & Sons, Ltd.	33,553	33,753
Ford & Walton, Ltd.	33,529	33,729

*Direct labour. £30,637 (subject to MH&LG approval).

Hartlepool.—Shop premises at Vane-st. for Hartlepools Co-operative Society, Ltd., Stockton-st., West Hartlepool. Plans by CWS Architects' Dept., 90 Westmorland-rd., Newcastle-on-Tyne. *Direct labour.

Heywood.—96 dwellings at Heady Hill (Part 2) for TC. *Roy & Ptnrs., Ltd., 64 Blackfriars-rd., Salford. £120,631.

Honiton.—40 dwellings and site works at Jerrard estate for BC. A: Anthony Lamb (A), AMTPI, 2 Prospect-pl., Ottery St. Mary, Devon. QS: R. M. Powell, AIQS, Sidmouth. *H. E. Hansford, King-st., Honiton, Devon. Groups A and B, £65,341; Group C, £10,034 (fixed price tenders).

Islington.—36 one-bedroom flats at Rhodes-st., Georges-rd. and Asteys-row (on Contractor's own site), for MBC. ‡Day (Contractors), Ltd. £77,400 (negotiated tender).

Islington.—24 dwellings on site of former Highbury Hill Baptist Church for MBC. A: Messrs. E. C. P. Monson. QS: Messrs. Oswald E. Parratt. ‡Rowley Bros., Ltd. £40,054 (negotiated tender).

Lancaster.—Housing redevelopment of Main-st. and Captains-row area for TC. *G. Wimpey & Co., Ltd., London. £530,000.

Leeds.—Following for TC:—420 flats at Moor Grange estate. *G. Wimpey & Co., Ltd., London. £824,199.—240 flats at Swarcliffe and Moor Grange estates. *W. J. Simms, Son & Cooke, Ltd., Nottingham. £467,732.—260 dwellings at Moor Grange estate. *Fell Construction Co., Ltd., Wakefield. £339,323.—66 dwellings at Armley Ridge estate. *Direct labour.

Liskeard, Cornwall.—New county sec. sch. for Cornwall EC. *J. W. Spencer, Ltd., Plymouth. £99,150.

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Liverpool.—Additional classrooms at Holt High School for EC. *C. Heskin (Builders), Ltd., St. Mary's-rd., Huyton. £11,703.

¶**London (Air Ministry).**—New works contracts to value of £500 or over for week ended April 17.—*Building work:* Kinloss, Morayshire, The Scottish Tarmacadam and Asphalte Co., Ltd., Midland Works, 44-52 Bilbao-st., Glasgow, C5; Quedgeley, Glos., William T. Nicholls, Ltd., St. Pauls-rd., Gloucester; Coningsby, Lincs., Frank R. Eccleshare, Ltd., Dixon-st., Lincoln; North Luffenham, etc., Rutland., A. Monk & Co., Ltd., Padgate, Warrington; North Coates, Lincs., Ellis Thompson & Co., Ltd., James-st., Louth, Lincs. *Artificers' work:* Vat Ley, Anglesey, etc., Henry Jones & Sons (Rhosneigr), Ltd., Beach-rd., Rhoneigr, Anglesey; Little Rissington, Glos., Stanley V. Davis, Ltd., Church-st., Fifield, Oxon; Melksham, Wilts, etc., Yatesbury, Wilts., etc. and Andover, Hants., etc. (3 contracts), Dudley Coles, Ltd., 6-13 Bath-st., Plymouth, Devon; Rufforth, York, Etc., Fred Pearson & Co., Ltd., 32 Cemetery-rd., Doncaster, Yorks.; Hullavington, Wilts., Holborow Constructions, Ltd., Love-la., Cirencester, Glos. *Heating and hot water services:* Mildenhall, Suffolk, Norris Warming Co., Ltd., Burley-hse., Theobalds-rd., WC1. *Electrical installation:* South Western Counties, South Western Electricity Bd., Colston-ave., Bristol, 1; Southern Electricity Bd., Littlewick Green, Maidenhead, Berks.; North Luffenham, Rutland., Frank Hancock (1939), Ltd., 40/42 Summer-row, Birmingham, 3. *Electrical mains distribution:* North Luffenham, Rutland, W. T. Parker, Ltd., 113/14 Station-st., Burton-on-Trent, Staffs.

London (British Railways).—Contracts placed by Eastern Region:—Haymills (Contractors), Ltd., Empire-hse., Hanger-green, Ealing, W5, extensions and alterations to feeder station at Bethnal Green; Wellerman Bros., Ltd., Dun-st., Sheffield, 3, Yorks, renewal of part of timber walling on River Lea, between Canning Town and Bow Creek; T. Fletcher & Co., Ltd., Forest-rd., Mansfield, Notts, remedial works in connection with 23 filled-in arches of Bridge No. 155, between Woodhouse and Waleswood; Spanner Boilers, Ltd., Wokingham-rd., Bracknell, Berkshire, supply, delivery and installation of three 10,000 lb./hr. horizontal oil-fired boilers for Stratford Locomotive and Carriage Works.

London CC.—New day special sch. for physically handicapped children at Elmcourt-rd., Norwood.

Howard & Co.	£33,013
T. R. Roberts (Builders), Ltd.	32,073
E. J. Lacy & Co., Ltd.	31,673
Thomas & Edge, Ltd.	31,400
Halse & Sons, Ltd.	30,905
*William Blood, Ltd., Lambeth	30,368

Architect's comparable estimate is £30,784.

London CC.—Fixed price tenders for changing units at Prince Edward Playing field, Harrow.

Chas. F. Kearley, Ltd.	£73,559
Thomas & Edge, Ltd.	72,946
Y. J. Lovell & Son, Ltd.	72,890
C. P. Roberts & Co., Ltd.	70,938
Gray Conoley & Co., Ltd.	67,554
Walker (Tooting), Ltd.	67,322
Harrison & Spooner, Ltd.	66,568
R. Mansell, Ltd.	64,940
Perry's (Ealing), Ltd.	62,621
*G. Ward (Ealing), Ltd. Ealing, Middx.	62,190

Architect's comparable estimate is £70,409.

London CC.—New county sec. sch. at North Wharf-rd., Paddington.

Rowley Bros., Ltd.	£401,500
Prestige & Co., Ltd.	398,597
Walter Lawrence & Son, Ltd.	397,520
Kirk and Kirk, Ltd.	392,031
A. T. Rowley (London), Ltd.	388,755
C. Miskin & Sons, Ltd.	388,004
Y. J. Lovell & Son, Ltd.	382,442
F. & H. F. Higgs, Ltd.	379,672
W. J. Simms, Sons & Cooke, Ltd.	377,882
Speirs, Ltd.	375,375
Thomas & Edge, Ltd.	366,570
*Token Construction Co., Ltd., Westminster	365,258

Architect's comparable estimate is £381,179.

London CC.—Clubroom and youth centre at Ashburton estate, Putney.

King's (B.D.J.), Ltd.	£19,209
Stewart & Partners, Ltd.	18,630
A. H. Franklin & Sons, Ltd.	17,404
Leslie Bilsby, Ltd.	17,346
Courtney & Fairbairn, Ltd.	16,521
M. Howard (Mitcham), Ltd.	16,089
*Howard & Co., Westminster	15,773

Architect's comparable estimate is £17,472.

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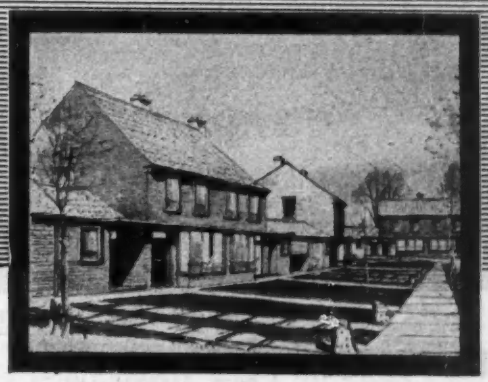

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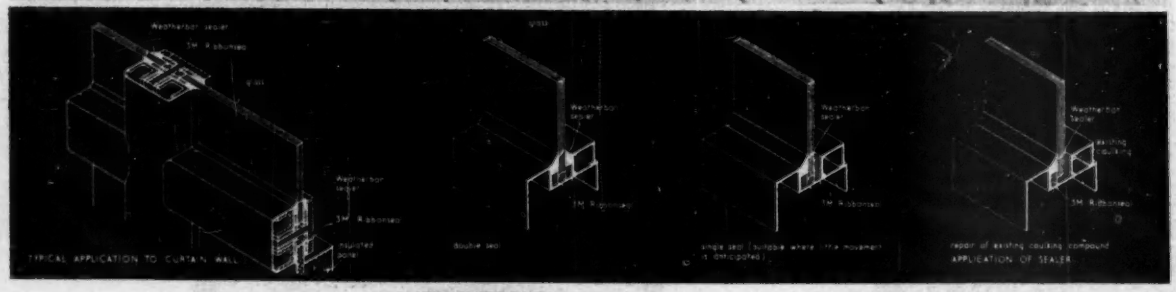

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London CC.—Alterations and improvements at Bec school, Wandsworth. A: Architects' Co-Partnership (A), 44 Charlotte-st., W1.

Cramb & Dean, Ltd.	£24,363
Siggs & Chapman, Ltd.	24,261
William Blood, Ltd.	24,014
M. Howard (Mitcham), Ltd.	23,958
Killby & Gayford, Ltd.	23,951
E. J. Lacy & Co., Ltd.	23,915
Truett & Steel, Ltd.	23,894
*J. & C. Bowyer, Ltd., Croydon	23,220

Architects' comparable estimate is £23,500.

London CC.—Fixed price tenders for changing unit at Coldharbour playing field, Woolwich.

Courtney & Fairbairn, Ltd.	£32,796
John Harrison (London), Ltd.	32,361
T. R. Roberts (Builders), Ltd.	31,344
Grant & Ptnrs., Ltd.	31,136
Greenaway & Son, Ltd.	30,910
*J. E. Webb & Co., Ltd.	30,902

Architects' comparable estimate is £33,213.

London CC.—Fixed price tenders for repairs to Brookmill county prim. sch., Greenwich.

Henry Kent (Builders), Ltd.	£29,785
George Green (Beckenham), Ltd.	29,349
William Mills & Sons, Ltd.	28,306
Hotson Bros., Ltd.	27,748
W. J. Eaglen, Ltd.	27,334
*J. & C. Bowyer, Ltd., Croydon	24,990

Architects' comparable estimate is £24,820.

London CC.—Fixed price tenders for additional class rooms, laboratories, etc., at John Howard county sec. sch., Hackney. A: J. M. Austin-Smith & Ptnrs. (A), 29 Sackville-st, W1.

A. W. Jaggers, Ltd.	£33,295
Wm. J. Jerram, Ltd.	32,671
S. C. Grover, Ltd.	32,179
R. J. Truscott, Ltd.	32,027
Hammond & Miles, Ltd.	31,140
C. J. Manning (Builders), Ltd.	30,877
E. A. Russell, Ltd.	30,577
*Tagg & Egerton, Ltd., Romford, Essex (Subject to economies of £640).	29,611

Architects' comparable estimate is £31,429.

London CC.—Installation of gas water-heaters in 839 dwellings at Clapham Park estate, Clapham, Glebe estate, Peckham, Loughborough estate, Brixton, and Streatham Hill estate, Streatham.

J. B. Jackson & Ptnrs., Ltd.	£45,808
Ellis (Kensington), Ltd.	43,586
J. C. Spooner (Heating), Ltd.	41,107
F. J. Baynes & Co., Ltd.	40,783
Wm. Edgar & Son, Ltd.	40,621
*Stitson, White & Co., Ltd., Westminster	39,457

Director of Housing's comparable estimate is £39,070.

London CC.—Construction on Stangrove Park site, Edenbridge, Kent, of 312 houses.

Y. J. Lovell & Son, Ltd.	£552,976
Thomas and Edge, Ltd.	538,078
Leslie & Co., Ltd.	528,432
C. J. Howard & Son, Ltd.	498,967
Rush and Tompkins, Ltd.	490,663
Carlton Contractors, Ltd.	470,456
G. T. Crouch, Ltd.	466,801
*Croudace, Ltd., Caterham, Surrey	458,711

Architects' comparable estimate is £497,913.

London CC.—Construction at Loughborough estate, Brixton, of 96 maisonettes in six four-storey blocks, together with 48 tenants' stores, five garages and a motor-cycle store.

Hall, Beddall & Co., Ltd.	£251,374
Thomas Bates & Son, Ltd.	246,700
Halse & Sons, Ltd.	238,192
A. T. Rowley (London), Ltd.	237,401
Token Construction Co., Ltd.	234,562
M. J. Gleeson (Contractors), Ltd.	234,256
W. J. Simms, Sons & Cooke, Ltd.	233,857
Leslie & Co., Ltd.	228,741
Rowley Bros., Ltd.	226,418
Carlton Contractors, Ltd.	225,864
Tersons, Ltd.	224,548
*Thomas & Edge, Ltd., Woolwich	219,489

Architect's comparable estimate is £234,108.

London CC.—Additions and improvements to South Eastern general ambulance station, Deptford.

William Mills and Sons, Ltd.	£19,716
Fredk. Smith & Co., Ltd.	16,637
T. R. Roberts (Builders), Ltd.	16,305
Grant and Partners, Ltd.	16,215
O. H. Groves & Co., Ltd.	16,100
Courtney & Fairbairn, Ltd.	15,883
*Collis & Co., Ltd., Chelsea	15,743

Architect's comparable estimate is £16,188.

London CC.—Switchboards, transformers and auxiliary electrical apparatus in connection with new extensions at southern outfall works, Erith.

Metropolitan-Vickers Electrical Co., Ltd.	£57,863
Ferguson Pailin, Ltd.	57,803
The General Electric Co., Ltd.	57,795
English Electric Co., Ltd. (*after arithmetical correction*)	57,734
The British Thomson-Houston Co., Ltd.	56,898
A. Reyrolle & Co., Ltd.	56,694
Crompton Parkinson, Ltd.	56,541
Brush Electrical Engineering Co., Ltd.	52,298
Ferranti, Ltd.	50,399
George Ellison, Ltd.	50,399
Transformers (Watford), Ltd.	47,568
Yorkshire Switchgear & Engineering Co., Ltd.	46,792
*Johnson & Phillips, Ltd., Greenwich	43,693

Chief engineer's comparable estimate is £64,400.

London CC.—Sewage pumping plant for extension to southern outfall works, Erith.

The Mirrlees Watson Co., Ltd.	£329,933
Sigmund Pumps, Ltd.	285,104
Vickers-Armstrong (Engineers), Ltd.	269,878
W. H. Allen, Sons & Co., Ltd.	255,975
*Gwynnes Pumps, Ltd., Hammersmith (*revised tender*)	252,708

Chief engineer's comparable estimate is £260,000.

London CC.—Hostel for 70 students at Shoreditch training college, Egham, Surrey.

Grace & Marsh, Ltd.	£61,217
William Lacey (Hounslow), Ltd.	56,692
Boyd & Murley, Ltd.	55,738
Y. J. Lovell & Sons, Ltd.	55,336
E. Clarke & Sons (Addlestone), Ltd.	54,292
Perrys (Ealing), Ltd.	53,997
J. M. Jones & Sons, Ltd.	53,750
W. H. Gaze & Sons, Ltd.	53,494
J. Lawson & Co., Ltd.	53,479
*Carlton Contractors, Ltd., Epsom, Surrey	51,633

Architect's comparable estimate is £53,286.

¶London (Metropolitan Police).—Tenders for building works:—*Internal redecorations:* Tower Bridge police station, F. Whittlesea, Ltd., £1,324; Peel-hse, Regency-st., SW1, Druce & Co. (Decorations), Ltd., £4,388; Chelsea police station, F. Whittlesea, Ltd., £1,547; Walham Green police station and section house, Apletree & Son, £1,465. *New courtroom:* Marlborough-st. Court, Killby & Gayford, Ltd., £4,233.

¶London (MoW).—Contracts placed for week ended April 10:—*Fifeshire:* Branch Post Office, Wellesley-rd., Buckhaven, erection, Crudens, Ltd., Musselburgh. *Gloucestershire:* Wapley, external and internal decorations, W. J. Naylor & Co. (P.C.), Ltd., Station-rd., Filton, Bristol. *London:* Queen Mary Building (2nd Floor, South), Royal Naval College, Greenwich, SE10, reconstruction of sanitary accommodation, Fredk. Smith & Co. (Builders), Ltd., 56/60 New Cross-rd., SE14; Northumberland-hse., Northumberland-ave., WC2, installation of LPHW heating in part of zone 'A,' Hope's Heating & Engineering, Ltd., 16 Berners-st., W1; Tate Gallery, Millbank, SW1, construction of new staircase, Marshall Andrew & Co., Ltd., 31 Queen Anne's-gate, St. James's Park, SW1. *Middlesex:* HMSO, 263 Water-rd., Alperton, oil fired boiler installation, H. R. Noble, Ltd., 236 North Circular-rd., Palmers Green, N13. *Midlothian:* Royal Scottish Museum, Edinburgh, new lecture hall, Thaw & Campbell, Ltd., 136 Paton-st., Glasgow, E1. *Somerset:* Bath—Block C, Foxhill, supply of two timber huts, F. Pratton & Co., Ltd., Midsomer Norton, nr. Bath. *Surrey:* Telephone Exchange, Lower Hook, Surbiton, erection, W. H. Gaze & Sons, Ltd., High-st., Kingston-on-Thames.

¶London (War Dept.).—Works contracts *shire:* (Brecon and Sennybridge) miscellaneous, placed for week ended April 10:—*Brecknock:* B. Jenkins & Sons, Brecon; *Cumberland:* (Carlisle), cooking equipment, Eric Johnston, Carlisle; *Derbyshire:* (Sudbury), roadwork, G. F. Tomlinson & Sons Ltd., Derby; *Denbighshire:* (Wrexham), miscellaneous, J. W. Bostock, Ltd., Gwersyllt; *Dorset:* (Blandford), roadwork, O. J. Elliott & Co., Ltd., Bristol; *Hampshire:* (Aldershot), walling, R. C. Radford, Farnham; *Morayshire:* (Elgin), Miscellaneous, The Scottish) Tarmacadam and Asphalte Co., Ltd., Glasgow; *Norfolk:* (East Wretham), Electrical, G. W. Day & Co., Ltd., London, SW; *Northumberland:* (Redesdale and Denehead), roadwork, Thomas Muckle & Sons, Rothbury; *Nottinghamshire:* (Chilwell), building, F. Perks & Sons, Ltd., Long Eaton; *Oxfordshire:* (Bicester) demolition, J. & A. Demolition Co., Ltd., London; *Pembrokeshire:* (Manorbier), building, Hussey, Egan & Pickmere, Ltd., Birmingham; *Warwickshire:* (Long Marston), building, W. J. Simms Sons & Cooke, Ltd., Nottingham; heating, Steels Engineering Installations, Ltd., Birmingham; *Wiltshire:* (Warminster), water supply, James & Crockerell, Ltd., Salisbury; *Yorkshire:* (Catterick Camp), building, Sir Lindsay Parkinson & Co., Ltd., London, SE1; (Huddersfield and Halifax), miscellaneous, P. J. Parrot & Co., Ltd., Leeds; (Catterick), demolition, S. Walton, Tintern Melton.

Manchester.—New engineering works at Knowsley-st. and Sherborne-st. for CWS, Ltd. *CWS Building Dept., Vere-st., Salford.

Middlesbrough.—Alterations and additions to College of Art for EC. Education A: K. J. Caton (A), Education Offices, Middlesbrough. QS: Turner & Townsend, 71 Linthorpe-rd., Middlesbrough. *H. & P. W. Skeen, Ltd., George-st., Thornaby-on-Tees. £12,432.

Middlesbrough.—30 houses at Easterside housing estate for TC. Boro' E: J. A. Kenyon. *C. W. Athey & Sons, Ltd., Windsor-rd., Middlesbrough.

Middlesbrough.—Preparation and laying out of playing fields for Prissick sch. for EC. Education A: K. J. Caton (A). *En Tout Cas, Ltd., Leicester. £33,874.

Middleton.—Phase 1 of Cardinal Langley grammar tech. sch. for RC Diocese of Salford. *E. Taylor & Co., Ltd., Ebor Sawmills, Littleborough.

Newton Aycliffe.—Fixed price tenders for 204 houses, 72 lock-up garages and three motor-cycle lock-ups at housing precinct E4, Newton Aycliffe. Corpn's. Ch. A. Ch. QS: A. G. Blair, ARICS. Leslie & Co., Ltd., £323,057; Bell & Ridley, Ltd., £321,206; R. G. Finlay, Ltd., £318,107; Milton Hindle, Ltd., £312,941; W. Veti (Builders), Ltd., £305,474. *Direct labour, £278,116.

Northampton.—Works for CBC at King's Heath. Boro' A and TP Officer: Brian Bunch (A) AMTPI. (a) Groups 10 and 11—75 dwellings.—*T. Wilson & Son, Ltd., 65-67 Sheep-st., Northampton, £121,574; (b) Groups 12 and 13—54 dwellings and 30 lock-up garages.—*Clements Bros. (Northampton), Bell's Yard, Bedford-rd., Northampton, £89,332. (c) Group 14—29 dwellings.—*Adkins & Shaw (Builders & Contractors), Ltd., The Clock Chambers, St. James-rd., Northampton, £47,608.

North Riding.—Erection of offices at Guisborough for CC. County A: H. J. Knowles (A), County Hall, Northallerton. *Middleton & Co. (Leeds), Ltd., Bank-st. Sidings, Blackpool.

Northwich.—Memorial Hall for Memorial

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Hall Committee. *J. & F. T. McEllin, Ltd., Bignall End, Stoke-on-Trent. £38,618.

Nottingham.—18 maisonettes and 2 flats at Sneinton Redevelopment area. *A. F. Houfton, Ltd., 8 Coventry-rd., Bulwell, Nottingham. £46,521.

Peterlee (Co. Durham).—Additions to Peterlee Workmen's Club. A: J. M. Angus (L), 3 Gallowgate, Newcastle-on-Tyne. *CWS Building Dept., Benton-rd., Newcastle-on-Tyne. £33,500.

Rawtenstall.—52 dwellings at Higher Cloughfold for BC. *Gregory Housing, Ltd., Worthing.

Rotherham.—Assembly hall and gymnasium at grammar sch for EC. *C. Earnshaw (Rotherham), Ltd.

Rowley Regis.—76 houses, 8 bungalows and 14 garages at Blackberry-la. estate for TC. *Five Oaks Estates, Ltd., Wolverhampton. £121,414.

Rugby.—39 dwellings at Featherbed-la., portion of Abbots Farm estate for BC. *Clarke Bros., Ltd., Leamington Spa. £65,531.

Scarborough. — Additions to Scarborough Girls' High sch. for North Riding EC. A: Grenfell Baines & Hargreaves (A/A), 12-24 Guildhall-st., Preston, Lancashire. QS: A. E. Towler, 117 Fishergate, Preston. *E. Hunter (Scarborough), Ltd., Beaconsfield-st., Scarborough. £22,086.

Sowerby Bridge.—Demolition of Almshouses and erection of 6 shops and 3 flats for UDC. *R. Townson, Ltd., Owler Ings-rd., Brighouse. £16,173.

Stoke Newington.—22 flats on site of 16-22 Shakespeare-walk and 15-21 Milton-gro. for MBC. A: Howes & Jackman (F), 1 Verulam-bldgs., Gray's Inn, WC1. *Direct labour. £37,482 (adjusted tender).

Sunderland.—Temporary plate preparation shop and reinforced concrete crane track at the Pallion Shipyard of Short Brothers, Ltd. *Brims & Co., Ltd., Pandon-bldgs., City-rd., Newcastle-on-Tyne.

Sunderland.—Additions to 'Roker Hotel,' including 23 bedrooms and additional bathrooms, for J. W. Cameron & Co., Ltd., Lion Brewery, West Hartlepool. A: E. M. Lawson (A), Barras-bldgs., Barras Bridge, Newcastle-on-Tyne. *Snowdon Brothers, Handel-st., Sunderland.

Sunderland.—Erection of proposed Grindon Village prim. infant sch. for EC. Boro' A: H. C. Bishop (A), Grange-hse., Stockton-rd., Sunderland. *Tate & Holmes, Ltd., Ltd., Benwell, Newcastle-on-Tyne. £65,567.

Sutton Coldfield.—40 dwellings off Harcourt-dr., for BC. *Crossley Bros. (Builders), Ltd., Birmingham. £56,380.

Wakefield.—4 shops and offices at The Springs for Wakefield Shop Developments, Ltd. *M. J. Gleeson (Contractors), Ltd., Chesterfield-rd., Sheffield.

Walthamstow.—Works for BC. Boro' A, E&S: F. G. Southgate (A), MIMunE, AMTPI. Eight flats on site of The Hydro, Forest-rd. *A. R. Sheppard, Ltd., £10,185.—10 maisonettes and two garages on site of 'The Golden Cross,' Mill-la. *Direct labour. £19,412 (subject, in each case, to approval of MH&LG).—Conversion of 38, 40, 42 and 46 Montalt-rd. into 12 flats and four maisonettes. *Direct labour. £19,100.

Washington (Co. Durham).—118 houses at Coach-rd. estate for UDC. S: T. E. Crowe. *Isaac Berriman, Ltd., The Woodlands, Fence Houses, Co. Durham. £151,345.

West Kesteven.—Homeville bungalows for RDC—8 at Fostern. *Fosters Builders, Wharf-rd., Grantham, £9,532. 12 at Gt. Gonerby. *Fosters Builders, £14,377. 4 at Old Somerby. *Jessop and Carr, Dysart-rd., Grantham, £5,346.

Whiston.—40 houses at Holt-la., Whiston, for RDC. E&S. J. Noonan & Son; S. Huyton & Co. (Builders), Ltd.; Harold Taylor & Co. (Builders), Ltd.; Harold Taylor & Co. (Warrington), Ltd.; E. Williams & Sons (Builders), Ltd.; The Sefton Building Co., Ltd.; G. and J. Seddon, Ltd.; *H. Horridge & Co., Ltd., Wargrave-rd., Newton-le-Willows.

Whitchurch (Salop).—New bank premises for Lloyds Bank Ltd. *Turiff Construction Co., Ltd., Budbrooke-rd., Warwick.

York.—Erection of Northfield open-air sch., Beckfield-la., for City E. City A: E. Firth (F), AMTPI. *J. & C. Hull, 22 Parliament-st., York. £42,758.

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OFFICIAL ANNOUNCEMENTS

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CONTRACTS

BOROUGH OF HESTON AND ISLEWORTH.

PROVISION OF NEW SCULLERY AT WELLINGTON JUNIOR SCHOOL.

TENDERS are invited for the provision of a new SCULLERY at Wellington Junior School. Firms wishing to Tender should make application to the Borough Engineer and Surveyor, 88 Lampton-road, Hounslow.

Tenders, in plain sealed envelopes endorsed "Tender — Wellington Junior School," but not indicating the sender, must be received by me by 10 a.m. on FRIDAY, 8th MAY, 1959.

The Council are not bound to accept any Tender.

D. MATHIESON,
Town Clerk.

Town Hall,
Hounslow,
Middlesex.

RICKMANSWORTH URBAN DISTRICT COUNCIL.

EXTERNAL PAINTING.

TENDERS are invited from experienced firms for the EXTERNAL PAINTING AND INCIDENTAL REPAIRS TO 315 COUNCIL HOUSES on the Mill End, Shepherds Farm, Berry-lane and Croxley Green Housing Estates, divided into six contracts of 40, 50, 55, 55, 57 and 58 houses respectively. Tenders may be submitted for one or all contracts but the commencing dates will be simultaneous. Specifications and Form of Tender may be obtained from the Engineer and Surveyor, Council Offices, Rickmansworth, on payment of £2 2s. 0d., returnable on receipt of a bona fide Tender. Tenders should be deposited in plain sealed envelopes endorsed "Painting Contracts —Housing" with the undersigned not later than NOON, THURSDAY, 7th MAY, 1959. The Council does not bind itself to accept the lowest or any Tender.

C. G. RANSOME WILLIAMS,
Clerk of the Council.

Council Offices,
High-street,
Rickmansworth, Herts.
10th April, 1959.

CWMBRAN URBAN DISTRICT COUNCIL.

CONSTRUCTION OF THIRTY-ONE TRADITIONAL TWO-BEDROOMED HOUSES.

TENDERS are invited for the CONSTRUCTION OF 31 TRADITIONAL TWO-BEDROOMED HOUSES at Lightwood Site, Oakfield-road, Cwmbran, where advanced preparation works have already been completed.

Plans, Specifications and Bills of Quantities with form of tender may be obtained from the Council's Architect, V. G. Powell, Esq., L.R.I.B.A., A.M.I.C.E., Council Offices, Cwmbran, on deposit of a cheque for £2 2s. 0d. payable to the Council. Such deposit will be refunded on receipt of a bona fide tender not subsequently withdrawn. Tenders must be delivered to the undersigned, sealed in the endorsed envelopes provided, not later than 12 noon on MONDAY, 4th MAY, 1959.

No direct labour tender will be submitted.

The Council does not bind itself to accept the lowest or any tender.

KENNETH G. S. GUNN,
Clerk of the Council.

Council Offices,
Cwmbran, Mon.
14th April, 1959.

BOROUGH OF EALING, Middlesex.

TENDERS invited on "Fixed Price" basis for the ERECTION OF SLIPPER BATHS at South Ealing.

Tender documents obtainable from Borough Surveyor, Town Hall, Ealing, W.5, upon payment of £5, returnable on receipt of a bona fide tender.

Tenders must be delivered to the Town Clerk, Town Hall, Ealing, W.5, not later than noon on 25th MAY, 1959.

E. J. COPE-BROWN,
Town Clerk.

BOROUGH OF EALING.

TENDERS invited on "Fixed Price" basis for the following contracts:

1. 64 Hanger-lane, Ealing, W.5: CONVERSION INTO 5 FLATS.
2. Lime Trees Estate, Northolt: ERECTION OF 34 FLATS IN 3 BLOCKS OF 2-STOREYS EACH.

Tender documents obtainable from Borough Surveyor, Town Hall, Ealing, W.5, upon payment of £5 for each tender, returnable on receipt of a bona fide tender.

R.I.B.A. Conditions of Contract apply.

Tenders must be delivered to the Town Clerk, Town Hall, Ealing, W.5, not later than noon on 21st MAY, 1959.

E. J. COPE-BROWN,
Town Clerk.

COUNTY BOROUGH OF ROTHERHAM.

HOUSING COMMITTEE.

The Corporation invites applications from Building Contractors who wish to TENDER for the ERECTION OF 138 HOUSES AND 56 GARAGES on the Kimberworth Park Estate.

The buildings are of traditional construction and the Tender will not allow for any fluctuation in the rates for labour or materials during the course of the Contract.

Forms of Tender and Bills of Quantities will be forwarded as soon as possible after receipt of application, which should be made to the Borough Engineer, Municipal Offices, Rotherham, not later than 10 a.m., TUESDAY, 5th MAY, 1959, accompanied by a deposit of five guineas, which will be refunded on receipt of a bona fide Tender.

The Corporation does not bind itself to accept the lowest or any Tender.

JOHN S. WALL,
Town Clerk.

Municipal Offices,
Rotherham.

COUNTY BOROUGH OF GREAT YARMOUTH EDUCATION COMMITTEE.

GRAMMAR SCHOOL EXTENSIONS, PHASE II.

TENDERS are invited for the ERECTION OF AN ASSEMBLY HALL, KITCHEN, AND ANCILLARY BUILDINGS at the Grammar School, Salisbury-road, Great Yarmouth.

Bills of Quantities, Forms of Tender, and all particulars may be obtained from F. Jackson, A.R.I.B.A., Schools Architect, 22 Euston-road, Great Yarmouth, on Friday, 1st May, 1959.

Applications must be accompanied by a deposit of £2 2s. 0d. which will be returned upon receipt of a bona fide tender and the return of all documents. Cheques should be made payable to The Great Yarmouth Corporation.

Sealed tenders are to be sent in the official envelope provided and delivered at my office not later than 9.30 a.m. on FRIDAY, 22nd MAY, 1959.

The Contract is subject to approval of the Ministry of Education and the Corporation does not bind itself to accept the lowest or any tender.

FARRA CONWAY,
Town Clerk.

Town Hall,
Great Yarmouth.

COUNTY BOROUGH OF BOURNEMOUTH.

REDHILL PARK FIRE STATION (R.I.B.A. FORM OF CONTRACT).

TENDERS are invited for a sub-contract on a FIXED PRICE basis for the copper roofing for the above.

Copies of drawings and specification may be obtained on written application to the Borough Architect's Office, Town Hall, not later than 1st MAY, 1959.

Tenders are to be received by me not later than 10 a.m. on 15th MAY, 1959.

A. LINDSAY CLEGG,
Town Clerk.

BEDFORDSHIRE EDUCATION COMMITTEE.

SANDYE-PLACE S.M. SCHOOL, SANDY, BEDFORDSHIRE.

It is proposed to demolish a large stone wall built of Local Brown Sandstone. The approximate yield of useable stone is estimated at 400 cubic yards.

Firms wishing to TENDER for:—

(a) DEMOLITION AND SITE CLEARANCE with credit for stone;

or

(b) PURCHASE AND REMOVAL OF STONE stacked on site;

should apply to the County Architect, Shire Hall, Bedford, not later than 1st MAY, 1959.

The Committee does not bind itself to accept the lowest or any Tender.

BOROUGH OF CHINGFORD.

ERECTION OF 40 HOUSES.

TENDERS are invited for the ERECTION OF 40 HOUSES at Hawkwood Crescent, Chingford.

Bills of Quantities and Conditions will be forwarded and drawings may be inspected on application to the Borough Engineer, Town Hall, Chingford, E.4, on payment of deposit of £2 2s. 0d. returnable upon receipt of a bona fide tender only.

Sealed tenders in the envelopes provided which shall not bear any name or mark indicating the sender should be delivered to me not later than 12 noon on MONDAY, 25th MAY, 1959 and tenders received after that time will not be considered.

The Council does not bind itself to accept the lowest or any tender.

CLIVE G. DENNIS,
Town Clerk.

Town Hall,
Chingford, E.4.

COUNTY BOROUGH OF ROTHERHAM.

CEMETERIES COMMITTEE.

CREMATORIUM, EAST HERRINGTHORPE.

The Corporation invites applications from Building Contractors who wish to TENDER for the ERECTION OF A CREMATORIUM at East Herringthorpe Cemetery, Rotherham.

The buildings are of traditional construction and the Tender will not allow for any fluctuations in the rates for labour and materials during the course of the Contract.

Forms of Tender and Bills of Quantities will be forwarded as soon as possible after receipt of application which should be made to the Borough Engineer, Municipal Offices, Rotherham, not later than 10 a.m. FRIDAY, 8th MAY, 1959, accompanied by a deposit of five guineas, which will be refunded on receipt of a bona fide Tender.

The Corporation does not bind itself to accept the lowest or any Tender.

JOHN S. WALL,
Town Clerk.

Municipal Offices,
Rotherham.
13th April, 1959.

LEEDS REGIONAL HOSPITAL BOARD.

TO BUILDING CONTRACTORS.

FIXED PRICE TENDERS are invited for carrying out ALTERATIONS TO SLUICES, ETC. at LYNFIELD MOUNT HOSPITAL, BRADFORD.

Applications for Form of Tender and Bills of Quantities accompanied by a deposit of £2 2s. 0d. (which will be refunded on receipt of a bona fide Tender and other contract documents) must be made to the Architect to the Board at the undermentioned address not later than 12 NOON on TUESDAY, 5th MAY, 1959. Cheques should be made payable to the "Leeds Regional Hospital Board" and crossed.

A copy of the drawings, Conditions of Tender and Conditions of Contract may be inspected at the hospital or at the office of the Architect to the Board, Park-parade, Harrogate.

Bills of Quantities will be ready early in May and three weeks will be allowed for Tendering.

The Board does not bind itself to accept the lowest or any Tender.

WM. A. SHEE,
Secretary to the Board.

Park-parade,
Harrogate,
Yorks.

BOROUGH OF WREXHAM.

PROPOSED NEW GUILDHALL

Firms wishing to TENDER for the following items for the above project should submit their names for consideration, together with a list of similar work undertaken by them, to Messrs. Stephenson, Young & Partners, 6 Bluecoat Chambers, Liverpool, by SATURDAY, the 2nd MAY, 1959. Tendering documents will then be sent to the selected firms.

1. Terazzo.
2. Armourplate doors and screens.
3. Sliding, folding screens.
4. Bronze balustrade and Council Chamber rail.
5. Plumbing and Fire Hoses.
6. Electrical Installation.
7. Ironmongery.
8. Strong Room Doors.
9. Joinery fittings, Counter to Treasurer's Office, Benches, etc.
10. Lantern Wind[illegible] to Council Chamber.

CITY OF BIRMINGHAM.

TO BUILDING CONTRACTORS.

CONTRACT 668
THREE HOUSES AND SHOP,
CROSS FARM-ROAD, HARBORNE.

The House Building Committee invite FIRM-PRICE TENDERS for the ERECTION of the above.

Bills of Quantities and Form of Tender will be forwarded on payment of £2 2s. at the office of A. G. Sheppard Fidler, City Architect, Civic Centre, Birmingham, 1, to whom all cheques should be made payable. Applications should be made by 29th APRIL, 1959. Conditions of Contract (which include the usual Fair Wages and Conditions of Labour Clause) may be seen at the City Architect's office during normal working hours.

The deposit will be returned on receipt of a bona fide tender, or on notification of inability to tender, together with the return of the documents not later than three days before the date for receipt of tenders.

Tenders, enclosed in the envelope provided for the purpose, must be sealed and delivered to the Town Clerk's Office (Room No. B. 31), Council House, Birmingham, 1, NOT LATER THAN 12 noon on FRIDAY, the 29th MAY, 1959. Tenders received after that time will be rejected.

The Committee do not bind themselves to accept the lowest or any tender.

J. F. GREGG,
Town Clerk.

The Council House,
Birmingham, 1.

COUNTY BOROUGH OF WALLASEY.

INTERNAL PAINTING OF SCHOOLS.

TENDERS to reach the undersigned by 8th JUNE, 1959 are invited for the INTERNAL PAINTING OF VARIOUS SCHOOLS in the Borough. Specification and Form of Tender obtainable from the Borough Architect, Town Hall, Wallasey.

A. G. HARRISON,
Town Clerk.

COUNTY BOROUGH OF SOUTHAMPTON.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Southampton C.B.C. invites TENDERS for the following contracts on Bills of Quantities which will be available at the end of May.

Contract B.311. 26 OLD PEOPLE'S FLATS and 4 TRADITIONAL HOUSES, Brownhill House.

Contract B.333. 5 TRADITIONAL HOUSES, Coxford-close.

Contract B.335. 6 BLOCKS OF 4-STOREY TRADITIONAL FLATS, Type "P" (14 Flats per Block), Thornhill Section 2B.

Applications for tender documents should be received by the Borough Engineer, Civic Centre, Southampton, by 10 a.m. on WEDNESDAY, 6th MAY, 1959.

LEEDS REGIONAL HOSPITAL BOARD.

TO HEATING AND ELECTRICAL CONTRACTORS.

SEPARATE FIXED-PRICE TENDERS are invited for carrying out:—

(a) Heating, H.W.S., Steam and Condense, Gas, Piped Medical Gas and Ventilation Installations;

and/or

(b) Electrical Installation,

at the THORACIC CENTRE, KILLINGBECK HOSPITAL, YORK-ROAD, LEEDS.

Applications for Form of Tender and Specification and Drawings, stating clearly the section(s) for which documents are required, accompanied by a deposit of £2 2s. for each section (which will be refunded on receipt of a bona fide tender and other contract document) must be made to the ARCHITECT TO THE BOARD at the undermentioned address not later than 12 noon on WEDNESDAY, 29th APRIL, 1959. Cheques should be made payable to the "Leeds Regional Hospital Board" and crossed.

A copy of the drawings, Conditions of Tender and Conditions of Contract may be inspected at the office of the Architect to the Board (or at the office of Messrs. Ernest Griffiths and Son, Consultant Engineers, Kinders, Bromborough, Cheshire).

Sealed tenders, in the endorsed envelope provided, must be delivered to the undersigned not later than 12 noon on WEDNESDAY, 27th MAY, 1959.

The Board does not bind itself to accept the lowest or any tender.

Wm. A. SHEE,
Secretary to the Board.

Park Parade,
Harrogate.

CITY OF WINCHESTER.

SHOPS AND HOUSING.
WINNALL MANOR ESTATE.

The City Council invites TENDERS for works consisting of the ERECTION OF A BLOCK OF PROPERTY comprising 6 Shops, 3 Flats and 2 Houses, at Garbett-road, Winnall Estate, Winchester.

Applications to Tender should be submitted to Messrs. A. S. Wilson & Partners, Chartered Quantity Surveyors, 8 Storey's Gate, Westminster, S.W.1, by MONDAY, 4th MAY, 1959, enclosing a cheque for £2 2s. payable to Winchester Corporation, which will be refunded on receipt of a bona fide Tender and the return of the documents.

The Bills of Quantity and Form of Tender will be sent to the applicant as soon as the documents become available.

The City Council do not bind themselves to accept the lowest or any Tender.

R. H. McCALL,
Town Clerk.

Guildhall,
Winchester.
14th April, 1959.

LINDSEY COUNTY COUNCIL.

TENDERS are invited for the ERECTION in traditional construction including a large amount of masonry, of a HOSTEL for Students and Domestic Staff at RISEHOLME FARM INSTITUTE near LINCOLN. The proposed building comprises approximately 23,900 sq. ft. of floor area. Bills of Quantities can be obtained from A. Ronald Clark, A.R.I.B.A., A.M.T.P.I., County Architect, County Offices, Lincoln, on receipt of a deposit of £3 3s., which will be returned on receipt of a bona fide tender by 10 a.m. on 20th MAY, 1959.

BOROUGH OF STOURBRIDGE.

120 DWELLINGS, RUFFORD ESTATE.

TENDERS are invited for the ERECTION OF 24 THREE-STOREY FLATS, 32 TWO-STOREY FLATS AND 64 HOUSES, together with incidental works.

The drawings may be inspected at the office of, and Bills of Quantities and Documents obtained from, the undersigned after 2nd MAY, 1959, on receipt of a deposit of Three Guineas.

Tenders in plain sealed envelopes endorsed "Housing Tender" to Town Clerk, Council House, Stourbridge, not later than NOON on 22nd MAY, 1959.

The Council does not bind itself to accept the lowest or any Tender. The acceptance of a Tender is subject to the approval of the Ministry of Housing and Local Government.

G. N. MAYNARD,
A.M.I.C.E., F.R.I.C.S.,
Borough Engineer and Surveyor.

Council House,
Stourbridge.
13th April, 1959.

COUNTY BOROUGH OF SWANSEA.

BOROUGH ARCHITECT'S DEPARTMENT.

DYNEVOR COUNTY SECONDARY SCHOOL FOR BOYS.

HEATING, HOT AND COLD WATER SERVICES.

FIRMS wishing to TENDER for the HEATING, HOT AND COLD WATER SERVICES at the above School are invited to submit their application to the Borough Architect, The Guildhall, Swansea, on or before FRIDAY, 8th MAY, 1959.

Plans, Specification and Conditions of Contract can be obtained on application and deposit of TWO POUNDS provided that the applicant gives satisfactory evidence of having previously carried out work of a similar character.

The deposit will be refunded after delivery of a bona fide tender (not subsequently withdrawn) and the return of all documents.

No guarantee is given that the lowest or any other Tender will be accepted.

T. B. BOWEN,
Town Clerk.

The Guildhall,
Swansea.
13th April, 1959.

BOROUGH OF MALDEN AND COOMBE.

TO BUILDING CONTRACTORS.

EXTERNAL DECORATIONS TO COUNCIL PROPERTIES DURING THE MUNICIPAL YEAR 1959-1960

Building Contractors wishing to TENDER for the above mentioned works which will comprise approximately 80 HOUSES and 130 FLATS and be divided into sections, are invited to submit their names to John Apse, A.M.I.C.E., Borough Engineer and Surveyor, Municipal Offices, New Malden, not later than 9th MAY, 1959. Applicants should give particulars of labour which could be assigned to the work and details of work now being or which has been carried out for Local Authorities.

Of those firms which apply, the Council may invite a limited number to Tender.

H. E. BARRETT,
Town Clerk.

Municipal Offices,
New Malden,
Surrey.

BOROUGH OF WALTHAMSTOW.

ERECTION OF SHOPS AND MAISONETTES.

TENDERS are invited for the ERECTION of FIVE SHOPS and SIX MAISONETTES in a three-storey block together with one block of TEN GARAGES and another block of FIVE GARAGES, on the site of Nos. 88-96 Wood-street, Walthamstow, E.17.

Applications to tender should be made to the Borough Architect, Engineer and Surveyor, Town Hall, Walthamstow, E.17, and must be accompanied by a deposit of £2 2s., returnable on receipt of a bona fide tender and the return of all documents issued.

The Bills of Quantities, Forms of Tender and Drawings will be available on or after the 29th APRIL, 1959, but applications may be made immediately.

Sealed tenders are to be delivered to the undersigned, in the endorsed envelope provided, by noon on FRIDAY, 22nd MAY, 1959.

Conditions of Contract will be available for inspection at the office of the Borough Architect, Engineer and Surveyor, between the hours of 9 a.m. and 5 p.m. from Monday to Friday, and between 9 a.m. and noon on Saturday.

The Council do not bind themselves to accept the lowest or any tender.

G. A. BLAKELEY,
Town Clerk.

Town Hall,
Walthamstow, E.17.
16th April, 1959.

COUNTY BOROUGH OF SWANSEA.

BOROUGH ARCHITECT'S DEPARTMENT.

DYNEVOR COUNTY SECONDARY SCHOOL FOR BOYS.

ELECTRICAL INSTALLATION.

FIRMS wishing to TENDER for the ELECTRICAL INSTALLATION at the above School are invited to submit their application to the Borough Architect, The Guildhall, Swansea, on or before FRIDAY, 8th MAY, 1959.

Plans, Specification and Conditions of Contract can be obtained on application and deposit of TWO POUNDS provided that the applicant gives satisfactory evidence of having previously carried out work of a similar character.

The deposit will be refunded after delivery of a bona fide tender (not subsequently withdrawn) and the return of all documents.

No guarantee is given that the lowest or any other Tender will be accepted.

T. B. BOWEN,
Town Clerk.

Guildhall,
Swansea.
13th April, 1959.

COUNTY BOROUGH OF GREAT YARMOUTH.

24 AGED PERSONS' BUNGALOWS, WARDEN'S AND COMMUNAL UNIT, MAGDALEN COLLEGE ESTATE, GORLESTON.

FIXED PRICE TENDERS are invited from:—

A. Builders and Contractors for the ERECTION OF THE ABOVE together with SUNDRY SITE WORKS.

B. Heating Engineers for OIL FIRED CENTRAL HEATING AND DOMESTIC HOT WATER INSTALLATION in the above.

Tendering particulars (Bills of Quantities for A, Specification and Drawings for B) with Forms of Tender may be obtained on or after the 30th April for B and 7th May for A from the Borough Engineer's Office where working drawings and conditions of contract may be inspected. Deposit of £2 2s. 0d., returnable upon receipt of a bona fide Tender not subsequently withdrawn, is required in each case.

Tenders in the envelope provided must be received by me not later than first post FRIDAY, 22nd MAY, 1959. The Council does not bind itself to accept any Tender.

FARRA CONWAY,
Town Clerk.

Town Hall,
Great Yarmouth.
15th April, 1959.

COUNTY BOROUGH OF DUDLEY.

SALOP-STREET—NITH-PLACE DEVELOPMENT.

Applications are invited from Building Contractors having the necessary plant, personnel and organisation to be included in a list of Contractors from whom TENDERS will be invited for the above work. The Contract, which will be on a fixed price basis, comprises the ERECTION OF 24 FLATS, in two blocks of three storeys each.

Applications to Tender must be submitted to the Borough Architect, 5 Ednam-road, Dudley, not later than FRIDAY, 1st MAY, 1959, and must be accompanied by a deposit of £2 2s. 0d. returnable upon receipt of a bona fide Tender; cheques to be made payable to "Dudley Corporation." Bills of Quantities and forms of Tender will be sent out shortly after the above closing date.

P. D. WADSWORTH,
Town Clerk.

The Council House,
Dudley, Worcs.
15th April, 1959.

CITY OF ROCHESTER.

PROPOSED TWO PAIRS OF OLD PERSONS' BUNGALOWS, LYNORS-AVENUE, STROOD.

The Corporation invites TENDERS for the ERECTION OF TWO PAIRS OF OLD PERSONS' BUNGALOWS in Lynors-avenue, Strood.

Copies of ⅛ in. scale plans, elevations and sections, bills of quantities and form of tender may be obtained from the City Surveyor, 66 Maidstone-road, Rochester, on payment of £2 2s. 0d., which will be returned on receipt of a bona fide tender.

Tenders must be addressed and delivered to the undersigned, not later than noon on TUESDAY, 19th MAY, 1959.

No tender will be received except in an envelope endorsed 'Tender for Old Persons' Bungalows,' but shall not bear any name or mark indicating the sender.

This tender is to be a fixed price tender.

The Corporation do not bind themselves to accept the lowest or any tender.

PHILIP H. BARTLETT,
Town Clerk.

Guildhall,
Rochester,
Kent.
17th April, 1959.

COUNTY BOROUGH OF HALIFAX.

IRONMONGERY AND SANITARY FITTINGS.

TENDERS are invited for items of (1) IRONMONGERY, and (2) SANITARY FITTINGS, which are included in P.C. and Provisional Sums in the main contract for the erection of 54 Flats at Brunswick-street, Halifax. Firms wishing to tender should apply to the Borough Engineer, Crossley-street, Halifax, by 4th MAY, 1959.

COUNTY BOROUGH OF SUNDERLAND.

Grange Park Junior and Infant School: INTERNAL PAINTING.

Hasting Hill School: INTERNAL PAINTING.

Havelock Primary School: INTERNAL PAINTING.

Grange Park Primary and Secondary Modern Schools: RENEWAL OF CEILINGS (Baseboard and plaster).

TENDERS are invited for the above works.

Particulars and forms of tender may be obtained from the Director of Education, 15 John-street, Sunderland.

Sealed tenders endorsed "Tender for . . . . ," followed by the item to which the tender relates, must be addressed to me and received at my office, Town Hall, not later than TUESDAY, 12th MAY, 1959.

G. S. McINTIRE,
Town Clerk.

THE URBAN DISTRICT COUNCIL OF HAVANT AND WATERLOO

invite FIXED PRICE TENDERS for the following works at their Depots as follows:—

(a) HAVANT DEPOT.

The provision and erection of a block of six prefabricated reinforced concrete commercial type garages together with washdown and sundry ancillary works.

(b) FISHERY-LANE DEPOT, HAYLING ISLAND.

(i) The provision and erection of a single prefabricated reinforced concrete commercial type garage.

(ii) The provision of material bays in traditional construction.

(c) WATERLOOVILLE DEPOT, HULBERT-ROAD.

(i) The provision and erection of a single prefabricated reinforced concrete commercial type garage.

(ii) The provision and erection of a prefabricated reinforced concrete Mess Hut and Convenience together with sanitary fittings and plumbing.

(iii) The provision of material bays in traditional construction.

Conditions of contract may be inspected at the office of the Engineer and Surveyor, 1 Park-road North, Havant, from whom the Specification and drawings may be obtained on or after MONDAY, 20th APRIL, 1959.

No tender will be received except in a plain sealed envelope, which may bear the word "Tender," followed by the subject to which it relates, but shall not bear any name or mark indicating the sender, and must be delivered to the Clerk of the Council, Town Hall, Havant, not later than 12 noon on THURSDAY, 14th MAY, 1959.

The Council do not bind themselves to accept the lowest or any of the tenders.

DURHAM COUNTY COUNCIL.

TENDERS invited from manufacturers of Heavy Duty Cooking Equipment required in educational establishments within the County Administrative area.

Tenders also invited:—

Seaham Harbour New Branch Library: ERECTION.

Application for further details to County Architect, South-street, Durham, not later than 6th MAY, 1959.

J. K. HOPE,
Clerk of the County Council.

Shire Hall,
Durham.

BOROUGH OF BEDFORD.

ERECTION OF 32 DWELLINGS WITH ANCILLARY WORKS, BRICKHILL ESTATE.

TENDERS are invited for the ERECTION of 32 DWELLINGS on Brickhill-drive and Robin Hill, Brickhill Estate, Bedford.

The period for tendering will be a minimum of two weeks and plans, etc., can be inspected at the Architect's Section of the Borough Engineer and Surveyor's Department.

Applications for tender documents should be made to F. W. Dawkes, Borough Engineer and Surveyor, Newnham House, Horne-lane, Bedford, accompanied by a deposit of £3 3s. (which is returnable on receipt of a bona fide tender not subsequently withdrawn) not later than 1st MAY, 1959.

The Council do not bind themselves to accept the lowest or any tender.

G. F. SIMMONDS,
Town Clerk.

Town Hall,
Bedford.

SCHOOL OF NAVIGATION, UNIVERSITY OF SOUTHAMPTON, WARSASH, SOUTHAMPTON.

TENDERS are invited for the ERECTION OF NEW DORMITORY AND COMMUNAL ACCOMMODATION for the School of Navigation. The Contract comprises the erection of a five- and a three-storey dormitory block of load-bearing brick construction with reinforced concrete floors and flat timber roofs, and a single storey communal block with reinforced concrete slabs and retaining walls, load bearing brick and steel frame.

The estimated cost is £210,000.

Contractors wishing to Tender should apply at once to the Architects, Richard Sheppard, Robson and Partners of 5 Southampton-place, London, W.C.1 who will advise on the selection of a panel of not more than 10 firms to be asked to submit Tenders.

Contractors should supply details of work of a similar size and nature for which they have been responsible during the last three years.

EAST BARNET URBAN DISTRICT COUNCIL.

CONSTRUCTION OF HOUSES, BUNGALOWS, FLATS AND GARAGES.

CONTRACT No. 888.

FIXED PRICE TENDERS are invited for the ERECTION OF 65 DWELLINGS AND 8 GARAGES at Pine-road Development Area, N.11.

Forms of Tender, Bills of Quantities, etc., may be obtained from the Engineer and Surveyor, Town Hall, Station-road, New Barnet, Herts., on payment of a deposit of £2 2s. 0d., which will be refunded on receipt of a bona fide tender. Drawings are available for inspection at the Town Hall.

Tenders, sealed in the envelopes provided, must be received by not later than SATURDAY morning, the 6th JUNE, 1959.

The lowest or any tender will not necessarily be accepted.

COUNTY BOROUGH OF BRIGHTON.

FIXED PRICE TENDERS are invited for:—

ERECTION OF 3 CHILDREN'S HOMES AT HOLLINGDEAN, LOWER BEVENDEAN AND SOUTH WOODINGDEAN ESTATES.

Bills of Quantities and Form of Tender may be obtained from the Borough Surveyor, Engineer and Planning Officer, 26-30 King's-road, Brighton, on or after MONDAY, 27th APRIL, 1959, on receipt of a returnable deposit of £2 2s. Drawings may be inspected upon application to the Borough Surveyor's Office.

Tenders are to be delivered to the Town Clerk, in the plain sealed envelope provided, not bearing any name or mark indicating the sender, not later than noon on MONDAY, 25th MAY, 1959.

W. O. DODD,
Town Clerk.

Town Hall,
Brighton.

COUNTY COUNCIL OF ESSEX.

ALTERATIONS AND ADDITIONS TO COTTAGE AND FARM BUILDINGS, COLDHAMS FARM, CLAVERING.

The Smallholding Committee invite FIXED PRICE TENDERS from Building Contractors with suitable organisation for ALTERATIONS to the SMALLHOLDERS COTTAGE, and ALTERATIONS and NEW FARM BUILDINGS at Coldhams Farm, Clavering, near Saffron Walden.

Plans, Specification, and Form of Tender may be obtained from the County Land Agent and Valuer's Department, 69 Duke-street, Chelmsford.

No tender will be considered unless contained in the envelope provided and delivered to the undersigned not later than 12 noon on WEDNESDAY, 13th MAY, 1959.

The County Council does not bind itself to accept the lowest or any tender.

CHRISTIAN BERRIDGE,
Clerk of the County Council.

County Hall,
Chelmsford.
April, 1959.

Hollow-tile floors roofs and balconies by

KLEINE

Sylvan Hill Estate.
for Borough of Croydon:
Borough Engineer & Surveyor:
A. F. Holt, M.I.C.E., M.I.Mun.E., M.I.Struct.E.
Architects: Riches & Blythin
(L. C. Holbrook, F.R.I.B.A.)

This is one of many post-war housing schemes carried out by the Borough of Croydon, in which Kleine construction was used.
There have been others at Brigstock Road, Heathfield Road, Violet Lane, Denmark Hill, Ely Road and Castle Hill.

At Shrublands (Stage 2) we are now engaged on yet another Croydon Borough Housing Scheme where, in addition to building 14,000 sq. yd. of Kleine floors and roofs, we are to build the reinforced-concrete frame to the 7-story Tall Block.

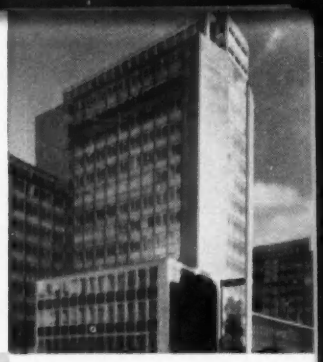
KLEINE IN CONCRETE SINCE 1905

THE KLEINE CO. LTD., 9-13 GEORGE STREET, MANCHESTER SQUARE, LONDON, W.1
Branches at Manchester, Birmingham, Newcastle, Bristol, Southampton and Glasgow

H

MONSANTO HOUSE
VICTORIA STREET
Architects:
Sir John Burnet,
Tait & Partners

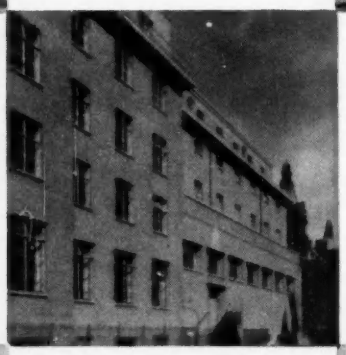
BOWATER HOUSE
KNIGHTSBRIDGE
Architects:
Guy Morgan & Partners



LYNTON HOUSE
TAVISTOCK SQUARE
Architect:
Raymond C. Arnold

J. ARTHUR RANK ORGANISATION
BELGRAVE ROAD · SW1
Architects:
T. P. Bennett & Son

ROYAL COLLEGE OF SURGEONS
LINCOLN'S INN FIELDS
Architects:
Young & Hall

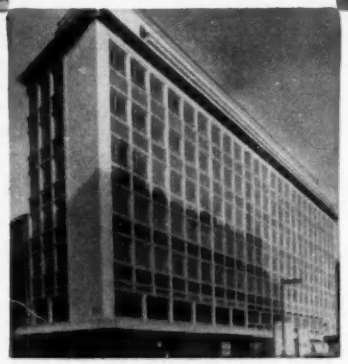


1 ST. JAMES'S SQUARE
Architects:
Mewes & Davies

BISHOP HOUSE
HIGH HOLBORN
Architects:
Trehearne & Norman,
Preston & Partners

VOGUE HOUSE
HANOVER SQUARE
Architects:
Yates, Cook & Darbyshire

WINGATE HOUSE
SHAFTESBURY AVENUE
Architects:
Sir John Burnet,
Tait & Partners



55-56 ST. JAMES'S STREET
Architects:
Lewis Solomon, Son & Joseph

VICTORY
EX-SERVICEMEN'S CLUB
SEYMOUR STREET
Architect:
Alister Macdonald

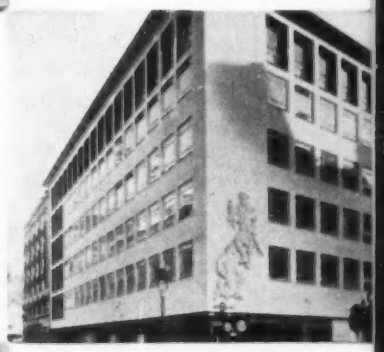
PENBERTHYS LTD
OXFORD STREET
Architects:
G. Edmund Wilford & Son

THE BIBLE COLLEGE
MARYLEBONE ROAD
Architects:
Clifford Culpin & Partner

A. DUNHILL LTD
JERMYN STREET
Architects:
T. P. Bennett & Son

129 KINGSWAY
Architects:
Fitzroy Robinson & Partners

QUAGLINO'S
JERMYN STREET
Architects:
T. P. Bennett & Son



12-18 ALBERT EMBANKMENT
Architect:
Leslie C. Norton

London beyond the City builds with . . .

CRITTALL WINDOWS

THE CRITTALL MANUFACTURING CO LTD · BRAINTREE · ESSEX · BRANCHES & DEPOTS THROUGHOUT THE COUNTRY

TBW/99

SO STRONG...

YET SO EASY TO CUT

TIMBERIT

hardboard

1/8" 3/16" 1/4" 5/16" 3/8" 7/16" & 1/2"

Write for samples and names of your local stockists to:

THOMAS SIMSON & COMPANY LIMITED

6 GREAT WINCHESTER STREET, LONDON, E.C.2.

Manufactured in the Union of South Africa by:

THE AFRICAN BUILDING BOARD CORPORATION LIMITED

STOCKED BY ALL LEADING TIMBER AND BUILDERS' MERCHANTS

OUNDLE AND THRAPSTON RURAL DISTRICT COUNCIL.

TENDERS FOR ERECTION OF 42 TRADITIONAL DWELLINGS, NASSINGTON AND KING'S CLIFFE.

The Council invite contractors wishing to TENDER for the above-mentioned combined works to notify Mr. H. G. Kenyon, L.R.I.B.A., Architect, Council Offices, Midland-road, Thrapston, Kettering, by THURSDAY, 7th MAY, 1959. A deposit of £4 4s. 0d. should accompany the application which will be refunded on receipt of a bona fide tender and the return of all documents.

The proposals comprise the ERECTION OF 26 TRADITIONAL DWELLINGS AND SUITE OF 7 GARAGES AND VARIOUS SITE WORKS at Nassington, and the ERECTION OF 16 TRADITIONAL DWELLINGS AND MINOR SITE WORKS at King's Cliffe.

Specifications and Bills of Quantities will be despatched after the above-mentioned date and tenders must be received at a date to be specified by the Architect with the despatch of the documents. At least 14 days will be allowed for tendering.

The Council do not bind themselves to accept the lowest or any tender.

H. H. HASSALL,
Clerk of the Council.

Council Offices,
Midland-road,
Thrapston,
Kettering.
15th April, 1959.

BOROUGH OF BARNSTAPLE.

ZEPHYR ESTATE.

TENDERS are invited for the ERECTION of the following dwellings on the above Estate:—

Contract No. 1: 1 BLOCK OF 10 OLD PEOPLE'S DWELLINGS TYPE A.2.

Contract No. 2: 1 PAIR HOUSES Type N.2; 1 BLOCK 12 HOUSES Type W.6.

Contract No. 3: 2 PAIRS HOUSES Type N.2; 1 PAIR HOUSES Type Y.1.

Contract No. 4: 1 PAIR HOUSES Type Y.1; 2 BLOCKS 4 HOUSES EACH, Type Y.2.

Contract No. 5: 1 PAIR HOUSES Type N.2; 1 BLOCK 10 HOUSES Type W.5.

Conditions of Contract, Specification and Plans may be obtained from the Borough Surveyor, The Castle, Barnstaple, on payment of a deposit of £2 2s. 0d. which will be refunded on receipt of a bona fide tender not subsequently withdrawn and the return of all documents supplied.

Tenders for the whole or any individual contract in plain sealed envelopes endorsed "Zephyr Estate Houses," to be sent to the Borough Surveyor, The Castle, Barnstaple, by 9 a.m. on FRIDAY, 15th MAY, 1959.

The Council does not bind itself to accept the lowest or any tender.

F. J. BROAD,
Town Clerk.

The Castle,
Barnstaple.
20th April, 1959.

NORFOLK EDUCATION COMMITTEE.

THE COUNTY TECHNICAL COLLEGE, KING'S LYNN.

Builders desirous of TENDERING for the ERECTION OF A CARETAKER'S BUNGALOW at the above-named Technical College should forward their names to the undersigned by WEDNESDAY, 6th MAY, 1959.

F. LINCOLN RALPHS,
Chief Education Officer.

County Education Offices,
Staceyroad,
Norwich.

BOROUGH OF WALTHAMSTOW.

ERECTION OF FLATS AND GARAGES.

TENDERS are invited for the ERECTION of SIXTEEN ONE-BEDROOM FLATS in a TWO-STOREY BLOCK together with ONE BLOCK OF FIVE GARAGES, on the sites of Nos. 2-32 Parkstone-road and Nos. 17-23 Wyatts-lane, Walthamstow, E.17.

Applications to tender should be made to the Borough Architect, Engineer and Surveyor, Town Hall, Walthamstow, E.17, and must be accompanied by a deposit of £2 2s., returnable on receipt of a bona fide tender and the return of all documents issued.

The Bills of Quantities, Forms of Tender and Drawings will be available on or after the 29th APRIL, 1959, but applications may be made immediately.

Sealed tenders are to be delivered to the undersigned, in the endorsed envelope provided, by noon on FRIDAY, 22nd MAY, 1959.

Conditions of Contract will be available for inspection at the office of the Borough Architect, Engineer and Surveyor between the hours of 9 a.m. and 5 p.m. from Monday to Friday, and between 9 a.m. and noon on Saturday.

The Council do not bind themselves to accept the lowest or any tender.

G. A. BLAKELEY,
Town Clerk.

Town Hall,
Walthamstow, E.17.
18th April, 1959.

ADMINISTRATIVE COUNTY OF LEICESTER.

Builders and Contractors with adequate facilities to complete in limited period desirous of being considered for inclusion in a selected list of contractors to tender for the COMPLETION OF THE ERECTION OF THE COALVILLE PROPOSED GRAMMAR SCHOOL, to submit names to the County Architect, 123 London-road, Leicester, by 9 a.m. on 4th MAY. Bills of Quantities will be available on Monday, 4th May, 1959, and tenders are returnable not later than 12 noon on THURSDAY, 28th MAY, 1959.

BOROUGH OF DAGENHAM.

ERECTION OF NINE OLD PERSONS' BUNGALOWS—KENNETH-ROAD.

TENDERS are invited for the above mentioned contract. Tender documents obtainable from Borough Surveyor upon payment of £2 2s. 0d. returnable on receipt of bona fide Tender

Closing date NOON, FRIDAY, 15th MAY, 1959.

KEITH LAUDER,
Town Clerk.

Civic Centre,
Dagenham.

COUNTY BOROUGH OF SWANSEA.

TO BUILDERS.

TENDERS are invited for the ERECTION of 94 DWELLINGS distributed over seven Slum Clearance Sites within a radius of ¼ mile in the Landore and Plasmarl Area.

Drawings of the Works and General Conditions of Contract may be inspected at the Office of the Borough Architect, The Guildhall, Swansea. Builders desiring to Tender must deposit the sum of TWO POUNDS with the Borough Architect on or before the 11th DAY OF MAY, 1959.

Bills of Quantities will be issued only to those builders who make the said deposit, which will be refunded after delivery of a bona fide Tender (not subsequently withdrawn) and the return of all documents.

Tenders must be delivered in exchange for a receipt or sent by registered post so as to reach me on or before the date stated in the Form of Tender and in accordance with the directions issued.

No guarantee is given that the lowest or any other Tender will be accepted.

T. B. BOWEN,
Town Clerk.

Guildhall,
Swansea.
16th April, 1959.

LEEDS REGIONAL HOSPITAL BOARD.

TO BUILDING CONTRACTORS.

FIXED PRICE TENDERS are invited for carrying out ALTERATIONS to the BOILER HOUSE, etc., at St. Johns Hospital, Goole.

Applications for Form of Tender and Bills of Quantities accompanied by a deposit of £2 2s. (which will be refunded on receipt of a bona fide tender and other contract documents) must be made to the Architect to the Board, at the undermentioned address not later than 12 noon on WEDNESDAY, 6th MAY, 1959. Cheques should be made payable to the "Leeds Regional Hospital Board" and crossed.

A copy of the drawings, Conditions of Tender and Conditions of Contract may be inspected at the office of Messrs. Wheatley and Houldsworth, Chartered Architects, Savile-street, Hull.

Bills of Quantities will be ready on 20th MAY and approximately three weeks will be allowed for tendering.

The Board does not bind itself to accept the lowest or any tender.

Wm. A. SHEE,
Secretary to the Board.

Park-parade,
Harrogate,
Yorks.

BINGLEY URBAN DISTRICT COUNCIL.

ERECTION OF ONE-BEDROOM FLATS.

TENDERS are invited for the ERECTION of the whole or any one of the following, complete with outbuildings, drainage and services.

(a) ONE BLOCK OF EIGHT ONE-BEDROOM FLATS at Queens-road, Crossflats.

(b) ONE BLOCK OF EIGHT ONE-BEDROOM FLATS at Wilsden.

(c) ONE BLOCK OF FOUR ONE-BEDROOM FLATS at Cullingworth.

Drawings may be seen and forms of tender, specifications and bills of quantities may be obtained from J. S. Latin, Esq., M.I.Mun.E., A.M.T.P.I., Surveyor and Architect, Town Hall, Bingley, on payment of two guineas which will be returned on receipt of a bona fide tender not subsequently withdrawn. Cheques to be made payable to the Bingley Urban District Council.

Tenders in sealed envelopes endorsed "Erection of Flats" and not bearing any mark indicating the tender should be delivered to the undersigned not later than noon on MONDAY, the 11th MAY, 1959.

The Council do not bind themselves to accept the lowest or any tender.

F. M. DUNWELL,
Clerk of the Council.

CORPORATION OF BARKING.

WESTBURY-ROAD FLATS.

Applications to TENDER for the above, estimated to cost approximately £30,000, are invited from Contractors in a position to proceed immediately with the work. Bills of Quantities will be supplied to selected applicants against a deposit of £5 5s. 0d. which will be returnable upon receipt of a bona fide Tender.

Applications to Tender on a form to be obtained from the Borough Architect, Town Hall, Barking, should reach the undersigned not later than the 4th MAY, 1959.

E. R. FARR,
Town Clerk.

Town Hall,
Barking.

CITY OF SALFORD.

PROPOSED FERNHILL SCHOOL.

Firm price TENDERS are invited for the ERECTION OF THIS SCHOOL IN Chaseley-road, Pendleton, Salford, 6.

Applications for Specification, Bills of Quantities and form of Tender (which will be available about the 27th April, 1959) should be made to the Architects, Richard Byrom, Esq., A.R.I.B.A., 9 Victoria Buildings, Silver-street, Bury.

Applications must be accompanied by a deposit of three guineas which will be returnable on the submission of a bona fide Tender not subsequently withdrawn.

Firm price Tenders should be addressed to the Town Clerk, Town Hall, Salford, 3, in a plain sealed envelope endorsed "Fernhill School" so as to be received not later than 10 a.m. on WEDNESDAY, the 20th MAY, 1959.

H. RIBBLESDALE THORNTON,
Town Clerk.

RIPLEY URBAN DISTRICT COUNCIL.

14 HOUSES, CEDAR-AVENUE, RIPLEY.

TENDERS, to be delivered by the 16th MAY, 1959, are invited for the ERECTION OF 14 HOUSES at Cedar-avenue, Ripley.

Specification and Bill of Quantities may be obtained from and drawings seen at the office of Mr. H. Hillier, Surveyor, Town Hall, Ripley, Derby, upon payment of a deposit of £2 2s. 0d. which will be refunded upon receipt of a bona fide Tender which is not subsequently withdrawn.

The Council does not bind itself to accept the lowest or any Tender.

DAVID R. PERRY,
Clerk of the Council.

BOROUGH OF REIGATE.

36 FLATS, OUTBUILDINGS AND GARAGE, THE DOME ESTATE, REDHILL.

FIXED PRICE TENDERS are invited for 6 BLOCKS OF SIX THREE-STOREY FLATS, OUTBUILDINGS, AND 15 GARAGES, based upon Bills of Quantities for substructure and site works, subject to remeasurement as work proceeds, and upon lump sum for the superstructure of the flats based upon Tender, Specification, Bills of Quantities and Plans, obtainable from the Borough Engineer and Surveyor, Town Hall, Reigate, on payment of a deposit of £2 2s., refunded upon the submission of a bona fide Tender, or the return of all Plans and Documents.

Sealed Tenders, in the envelope provided and endorsed "Tender for 36 Flats, The Dome Estate, Redhill," must be returned to the undersigned not later than noon on FRIDAY, 22nd MAY, 1959.

HEBER DAVIES,
Town Clerk.

Town Hall,
Reigate.
April, 1959.

BUCKS COUNTY COUNCIL.

Applications are invited from contractors for permission to TENDER for the ERECTION of a NEW JUNIOR SCHOOL in Tring-road, Aylesbury; estimated cost in the region of £50,000.

The contract (which will be on the R.I.B.A. Form modified to exclude Clauses 18(vii) and (viii) and 18(a) will provide for the school being completed within six months from the date of commencement, which will be 1st JULY, 1959.

The contract documents and all the information necessary to complete the contract will be forwarded to the successful contractor on the 22nd JUNE, 1959.

Contractors wishing to tender should show in their applications, which must reach the undersigned immediately, that they have the resources, in the light of their commitments, to carry out the works in the time stated; in particular, that they will have suitable labour available, by importation or otherwise.

Bills of Quantities and Forms of Tender will be available on the 15th MAY and tenders must be returned not later than 10 a.m. on MONDAY, 15th JUNE, 1959.

F. B. POOLEY,
County Architect.

County Offices,
Aylesbury.

COUNTY BOROUGH OF BRIGHTON.

FIXED PRICE TENDERS are invited for:—

ALTERATIONS AND ADDITIONS TO CONVERT "ELM COTTAGE," WARREN FARM, INTO HOME FOR 30 AGED AND INFIRM WOMEN.

Bills of Quantities and Form of Tender may be obtained from the Borough Surveyor, Engineer and Planning Officer, 26-30 King's-road, Brighton, on or after Monday, 11th May, 1959, on receipt of a returnable deposit of £2 2s. 0d. Drawings may be inspected upon application at the Borough Surveyor's Office. Tenders are to be delivered to the Town Clerk in the plain sealed envelope provided, not bearing any name or mark indicating the sender, not later than 10 a.m. on MONDAY, 1st JUNE, 1959.

W. O. DODD,
Town Clerk.

Town Hall,
Brighton, 1.

URBAN DISTRICT COUNCIL OF CHESHUNT.

38 DWELLINGS—GROVE HOUSE SITE.

Contractors are invited to submit their names by not later than 12 NOON, 14th MAY, 1959, for inclusion in a list of those who will be invited to TENDER for the ERECTION OF THESE DWELLINGS, etc. The Architect is Mr. Clifford Culpin, of 39 Doughty-street, London, W.C.1, and the Quantity Surveyors are Messrs. Dearle and Henderson, of 75 Victoria-street, London, S.W.1.

Contractors should give full details of recent similar work which they have carried out.

Bills of Quantities will be available for dispatch on 22nd May, 1959, and Tenders will require to be submitted by NOON on 18th JUNE, 1959.

The Council do not bind themselves to accept the lowest or any Tenders.

G. S. NEWNHAM,
Clerk of the Council.

Manor House,
Waltham Cross,
Herts.

CITY OF CHICHESTER.

HOMES FOR ELDERLY PERSONS, ST. PANCRAS, CHICHESTER.

TENDERS on a fixed price basis are invited for the ERECTION OF BED-SITTING-ROOM FLATLETS TO ACCOMMODATE 44 PERSONS.

Plans and Conditions of Contract may be inspected at the Office of the City Engineer and Surveyor, Greyfriars, North-street, Chichester, from whom copies of the Specification, Bill of Quantities and Form of Tender may be obtained on payment of £2 2s. 0d. which will be refunded on receipt of a bona fide Tender not subsequently withdrawn or the return of all documents. Cheques should be made payable to the Corporation of Chichester.

Tenders in plain sealed envelopes, addressed to the undersigned and endorsed "Tender for Homes for Elderly Persons, St. Pancras," must be received by first post on MONDAY, the 25th MAY, 1959.

The Council do not bind themselves to accept the lowest or any Tender, and the Contractor whose Tender is accepted must be prepared to enter into a Contract and Bond in a form to be prepared by me.

ERIC BANKS,
Town Clerk.

Greyfriars,
North-street,
Chichester.
24th April, 1959.

WHISTON RURAL DISTRICT COUNCIL.

PROPOSED ERECTION OF 10 AGED PERSON'S BUNGALOWS.

THE COUNCIL invite TENDERS for the ERECTION and COMPLETION of 10 AGED PERSON'S BUNGALOWS of Traditional construction on a site at Burrows-lane/St. Helens-road, Eccleston-lane ends.

Drawings, Specification and Form of Tender may be obtained on application to the undersigned at any time during office hours.

Tenders in plain, sealed envelopes, endorsed "10 Bungalows—Eccleston-lane Ends," but otherwise bearing no mark or indication of the sender must be received by the Clerk of the Council, at the undermentioned address not later than Noon, on TUESDAY, 19th MAY, 1959.

WATSON GARBUTT, A.M.I.Struct.E.,
Engineer and Surveyor.

Council Offices,
Delph-lane,
Whiston,
Nr. Prescot,
Lancs.

CITY AND COUNTY OF BRISTOL.

TO BUILDING CONTRACTORS.

Housing Committee invite TENDERS for ERECTION of 4 TRADITIONAL HOUSES at Whiteway-close/Whiteway-road, St. George, Bristol.

Contractors willing to submit FIXED PRICE TENDERS based on Specification, Schedule of Rates and Drawings, apply to City Architect, Council House, Bristol, 1, by 30th APRIL, enclosing 2 guineas deposit, payable to Bristol Corporation, refundable on receipt of bona fide tender not subsequently withdrawn.

METROPOLITAN BOROUGH OF WANDSWORTH.

FLATS AND HOUSES AT PUTNEY.

Contractors wishing to TENDER for ERECTION of THIRTY-THREE FLATS AND HOUSES in 2 and 3-STOREY BLOCKS at West Hill, should submit names to me by WEDNESDAY, 6th MAY, 1959, giving details of experience, plant and technical and supervisory staff available together with names of two technical and two financial referees. Bills of quantities will be issued to selected contractors in due course.

Drawings may be examined at office of architect, Mr. A. Llewellyn Smith, M.B.E., M.A., F.R.I.B.A., 103 Old Brompton-road, S.W.7.

J. NOEL MARTIN,
Town Clerk.

Municipal Buildings,
Wandsworth, S.W.18.

BOROUGH OF MORECAMBE AND HEYSHAM.

PROPOSED 26 FLATS FOR AGED PEOPLE—HEYSHAM HOUSE.

TENDERS are invited for the ERECTION OF 26 ONE-BEDROOMED FLATS on the Heysham House Estate, in FOUR BLOCKS OF FOUR FLATS AND ONE BLOCK OF TEN FLATS.

Specifications, Bills of Quantities and Form of Tender may be obtained from and plans inspected at the office of the Borough Engineer and Surveyor upon payment of a deposit of £2 0s. 0d. which will be returned on receipt of a bona fide tender not subsequently withdrawn.

Tenders endorsed "Flats, Heysham House," must reach me by 9 a.m. WEDNESDAY, the 13th MAY, 1959. The lowest tender will not necessarily be accepted.

ROGER ROSE,
Town Clerk.

20th April, 1959.

BIRMINGHAM, TAME AND REA DISTRICT DRAINAGE BOARD.

TENDERS FOR REPAIRS TO ROOFS OF 28 HOUSES AT MINWORTH, SUTTON COLDFIELD.

TENDERS are invited for STRIPPING OFF TILES, LAYING UNDERTILE FELT AND RE-TILING THE ROOFS of 28 of the Board's houses at Minworth, Sutton Coldfield.

Copies of the Board's General Conditions of Contract, Specification and Form of Tender may be obtained on application to M. R. Vincent Davies, B.Sc., M.I.C.E., Engineer to the Board, Rookery Park, Erdington, Birmingham, 24.

Tenders in the envelope provided must be delivered to the undersigned not later than noon on TUESDAY, 26th MAY, 1959.

The Board is not bound to accept the lowest or any other Tender.

ARTHUR J. WRIGHT,
Clerk to the Board.

Clerk's Office,
Lombard House,
Great Charles-street,
Birmingham, 3.
April, 1959.

PLEASE NOTE THE LATEST DATE FOR ACCEPTING ADVERTISEMENTS IN THIS SECTION IS 12o'clock NOON, TUESDAY, PRIOR TO ISSUE

PUBLIC APPOINTMENTS

WELSH REGIONAL HOSPITAL BOARD.

REGIONAL ARCHITECT'S DIVISION.

Applications are invited for the post of PRINCIPAL ASSISTANT ARCHITECT on the permanent staff of the Regional Architect in accordance with Whitley Council Conditions of Service. The salary is in accordance with Scale II (£1,195 x £45(2) x £15(1) x £45(2) x £30(1)-£1,420).

Applicants must be Registered Architects and thoroughly experienced in the preparation of working and detailed drawings, specifications and supervision of works in progress. A knowledge of hospital planning and design is essential.

The successful candidate will be responsible to the Regional Architect for a major division of work, involving travelling throughout the Principality. A motor mileage allowance and subsistence expenses in accordance with scale will be payable.

Applications, stating age, qualifications, experience, present and previous appointments and salary, the names of three referees, should be sent to the Secretary, Temple of Peace and Health, Cardiff, not later than 30th APRIL, 1959.

BOROUGH OF BEXLEY.

ASSISTANT ARCHITECT.

Applications are invited for this appointment at a salary within the Special Scale (£750 to £1,030 per annum) plus London Weighting.

Candidates should have experience in school and housing projects and must have passed the R.I.B.A. final.

Form of application and conditions of appointment are obtainable from the Borough Engineer, West Lodge, Broadway, Bexleyheath, Kent, to whom completed applications must be returned by 4th MAY, 1959. The Council may be prepared to assist in the provision of housing accommodation.

Canvassing will disqualify.

ARTHUR GOLDFINCH,
Town Clerk.

WARWICKSHIRE COUNTY COUNCIL.

ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments:—

(A) SENIOR HEATING ENGINEER, Grade A.P.T. III-IV, £845-£1,175.

(B) ASSISTANT HEATING ENGINEER, Grade A.P.T. III, £845-£1,025.

(C) ASSISTANT ELECTRICAL ENGINEER, Grade A.P.T. III, £845-£1,025.

(D) ASSISTANT ARCHITECTS, Special Grade, £750-£1,030 (see (2) below).

(E) ASSISTANT QUANTITY SURVEYOR, Special Grade, £750-£1,030 (see (3) below).

(F) SENIOR ACCOUNTS CLERK, Grade A.P.T. III, £845-£1,025 (see (4) below).

(G) ACCOUNTS CLERK, Grade Clerical III, £730-£820.

(1) The commencing salary for all appointments can be within the grades and would be settled having regard to the applicant's ability and experience.

(2) Applicants for appointment as ASSISTANT ARCHITECT should have passed Parts I and II of the R.I.B.A. Final or Special Examination or their equivalent at one of the recognised schools of architecture. The successful applicants will work in teams on large projects but opportunity will be given to men with enthusiasm and ability to design and carry out smaller projects under a Group Architect.

(3) Applicants for appointment as ASSISTANT QUANTITY SURVEYOR should be Chartered Quantity Surveyors. The person appointed will work in a team of surveyors on all types of building projects, teams being responsible for all stages, from the preparation of the estimates to the settlement of the final accounts.

(4) Applicants for appointment as SENIOR ACCOUNTS CLERK should have a sound knowledge of building accounts and previous service in a quantity surveyor's or building contractor's office will be an advantage. The person appointed will be responsible to the chief quantity surveyor for the running of the accounts section and experience in keeping contract account records is essential. The accounts section deals with the checking, certification and recording of all maintenance accounts, together with the keeping of contract accounts for all major building works.

(5) The appointments are on the established staff and subject to the Scheme and Conditions of Service of the National Joint Council for Local Authorities and the Local Government Superannuation Acts, 1937-1953. The Council is unable to offer housing accommodation but consideration will be given to the granting of financial assistance towards the payment of removal expenses. The successful applicants will be required to submit a satisfactory medical certificate.

(6) Applications are to be on forms which can be obtained from G. R. Barnsley, F.R.I.B.A., County Architect, Shire Hall, Warwick.

L. EDGAR STEPHENS,
Clerk of the Council.

Shire Hall,
Warwick.
April, 1959.

SOUTHAMPTON COUNTY BOROUGH COUNCIL requires under N.J.C. conditions of service:

ASSISTANT QUANTITY SURVEYOR, Salary within Special Grade (£750/£1,030 p.a.).

Applicants must be Chartered Quantity Surveyors, preferably with experience in municipal housing including multi-storey flats and shopping centres.

Apply on application form obtainable from the Borough Engineer and Surveyor, Civic Centre, Southampton, as soon as possible.

CAERNARVONSHIRE COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications invited for post of ASSISTANT ARCHITECT, A.P.T. II-III (£725-£1,025) from candidates who have passed the Final or Special Final Examination of the R.I.B.A. or their equivalent at a recognised school of Architecture. Commencing salary according to qualifications and experience. Further particulars and application forms from Clerk of County Council, Caernarvon. Closing date, 9th MAY.

KESTEVEN COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

QUANTITY SURVEYING ASSISTANTS
A.P.T. Grade I (£575-£725).

Full particulars of the above vacant appointments may be obtained from the County Architect, County Offices, Sleaford, Lincs.

Applications from suitably qualified persons, together with the names and addresses of two referees, should reach the undersigned not later than the 8th MAY, 1959.

J. E. BLOW,
Clerk of the County Council.

County Offices,
Sleaford,
Lincs.

SURREY COUNTY COUNCIL.

Applications are invited for the following appointments on GRADE IV (£1,025-£1,175 p.a., plus £30 London Allowance):—

ARCHITECTS: Must have, after qualifying as Associate Members R.I.B.A., 10 years' experience in preparation of drawings and specifications, and capable of assuming responsibility for medium to large scale contracts.

QUANTITY SURVEYORS: Must have, after qualifying as Associate Member R.I.C.S., 10 years' experience of estimating, taking-off, valuing works in progress and final accounts for large public buildings, including all specialist works.

STRUCTURAL ENGINEERS: Must have, after qualifying as Structural or Civil Engineer, 10 years' experience in design and detailing of steelwork and/or reinforced concrete for medium to large scale contracts.

HEATING AND VENTILATING ENGINEERS: Must have, after qualifying as Associate Member I.H.V.E., 10 years' experience in design of large heating, ventilating, hot water supply and gas service installations. The successful applicant must be capable of taking charge of works from commencement to final completion.

ELECTRICAL ENGINEERS: Must have, after qualifying as Associate Member I.E.E., 10 years' experience in design of large electrical services installations. The successful applicant must be capable of taking charge of works from commencement to final completion.

BUILDING SURVEYORS: Must have, after qualifying as Associate Member R.I.C.S., 10 years' experience in drafting specifications in all trades, preparation of schedules of dilapidations, detailed estimates for general maintenance works and surveys of properties.

Full details, present salary and 3 copy testimonials to County Architect, County Hall, Kingston, by 1st MAY, 1959.

The County Council have adopted a five-day week.

ISLE OF ELY COUNTY COUNCIL.

SENIOR PLANNING ASSISTANT.

Applications are invited from suitably qualified persons for the above APPOINTMENT. Salary within Special Grade (£750-£1,030). Work in Development Plan Section on preparation of Town Maps and County Map Review; village plans; layouts, etc. Applicants should be A.M.T.P.I. or hold equivalent qualification. National conditions. Consideration given in appropriate cases to assistance towards removal expenses.

Forms of application and further particulars obtainable from the County Planning Officer to whom they must be returned by 2nd MAY, 1959.

R. F. G. THURLOW,
Clerk of the County Council.

County Hall,
March, Cambs.

BIRMINGHAM REGIONAL HOSPITAL BOARD.

ARCHITECTURAL ASSISTANTS required. Salary scale £545-£765 p.a. Point of entry according to experience. Inter R.I.B.A. essential. Superannuable. Apply naming two referees, to Secretary, R.H.B., 10 Augustus-road, Birmingham 15, by 8th MAY, 1959.

COUNTY BOROUGH OF DERBY.

BOROUGH ARCHITECT'S DEPARTMENT.

(a) SENIOR ASSISTANT ARCHITECTS, Special Grade (£750-£1,030 per annum). Qualifications: A.R.I.B.A.

(b) ASSISTANT ARCHITECT, A.P.T. Grade I (£575-£725 per annum). Qualifications: Intermediate R.I.B.A.

Commencing salary according to qualifications and experience.

Permanent superannuable appointments, subject to one month's notice and to medical examination.

National Conditions of Service.

Application forms obtainable from and to be returned to the Borough Architect, The Council House, Corporation-street, Derby, not later than MONDAY, 4th MAY, 1959.

G. H. EMLYN JONES,
Town Clerk.

9th April, 1959.

COUNTY BOROUGH OF MERTHYR TYDFIL.

APPOINTMENT OF DEPUTY BOROUGH ARCHITECT.

Applications are invited from Associates of the R.I.B.A. with appropriate experience for the above post, at a salary in accordance with a scale based on two-thirds of the Borough Architect's salary, namely, £1,930 x £70(1) x £65(3) to £2,195.

Application forms may be obtained from the undersigned and must be returned with copies of three recent testimonials by 9th MAY, 1959.

The appointment is subject to the provision of the Local Government Superannuation Acts and to the passing of a medical examination and is terminable by three months' notice on either side.

Canvassing in any form will disqualify.

T. S. EVANS,
Town Clerk.

Town Hall,
Merthyr Tydfil.
7th April, 1959.

LONDON COUNTY COUNCIL.

ARCHITECT'S DEPARTMENT.

Vacancies for ENGINEERING ASSISTANTS (up to £860) and ENGINEERS, GRADE III (up to £1,090) required in:—

(A) STRUCTURAL ENGINEERING DIVISION. Extensive programme includes multi-storey flats, schools, offices, warehouses and other buildings, and

(B) DISTRICT SURVEYORS' SERVICE. In districts coinciding with one exception with Metropolitan Borough boundaries. Work mainly outside involving negotiations with architects, engineers and surveyors and supervision of works in progress. Good prospects in both of these aspects of the Council's work. Application form and particulars from the Architect to the Council, County Hall, S.E.1, quoting AR/EK/15/59. (257.)

LONDON COUNTY COUNCIL.

PARKS DEPARTMENT.

BUILDING SURVEYING ASSISTANTS. Good draughtsmen with experience of preparation of working drawings and specifications and supervision of contract work. Salary up to £860. Apply to Chief Officer, Parks Department (AI/BS), County Hall, S.E.1. (WATerloo 5000, ext. 8076.) (474.)

BANBURY

Make the finest Concrete Garages. 50 models from £46.15.0 Credit Sales.

Easy access timber-top concrete coal bunkers.

From 8/9 cwt. £5.5.0. plus carr

Battery Garages Many models lengths and widths; supplied to Councils everywhere.

Our Credit Sales terms cover everything.

Write for Single or Battery Garage, Greenhouse or Coal Bunker Leaflets.

PORTABLE CONCRETE BUILDINGS LIMITED

Ironstone House, Aynho Road, Adderbury East, Banbury, Oxon.

CITY OF LEEDS.

CITY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments:—

1. ASSISTANT ACHITECT. A.P.T. III (£845-£1,025).
2. ASSISTANT QUANTITY SURVEYOR. A.P.T. III (£845-£1,025).
3. ASSISTANT QUANTITY SURVEYOR. A.P.T. I (£575-£725).
4. ASSISTANT SURVEYOR. A.P.T. I (£575-£725).

Preference will be given to applicants who have had experience in surveying and measuring up of buildings with a view to their conversion.

5. LANDSCAPE SUPERVISOR. A.P.T. I (£575-£725).

Preference will be given to candidates who have had experience in the supervision of horticultural work on large estates.

6. INSPECTOR (HEATING AND VENTILATING). A.P.T. II (£725-£845).

Candidates must have had experience in the supervision of the installation of heating, domestic hot water and ventilating systems. The duties will be full time site supervision of jobs being carried out by contractors in various parts of the City.

7. CLERK OF WORKS. A.P.T. I (£575-£725).

Applicants are asked to clearly indicate the post for which they wish to be considered.

Medical examination. Superannuation payable.

Application forms from the City Architect, Priestley House, Quarry Hill, Leeds 9, to whom they should be returned by 12 noon on SATURDAY, 16th MAY, 1959.

Canvassing disqualifies.

R. A. H. LIVETT,
City Architect.

Priestley House,
Quarry Hill,
Leeds 9.
17th April, 1959.

BOROUGH OF MALDEN AND COOMBE.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

ASSISTANT BUILDING SURVEYOR.

Applications are invited for the appointment of ASSISTANT BUILDING SURVEYOR, Grade A.P.T. I (£575-£725 per annum, plus London "Weighting" £20 at age 21 years).

Preference will be given to applicants who have passed the Intermediate Examination of the R.I.C.S. (Building Section).

Application on forms to be obtained from John Apse, A.M.I.C.E., Borough Engineer and Surveyor, should be returned not later than 29th MAY, 1959.

HAROLD E. BARRETT,
Town Clerk.

Municipal Offices,
NEW MALDEN,
Surrey.

EXETER CITY COUNCIL.

Applications are invited for the following appointments:—

(a) JUNIOR ARCHITECTURAL ASSISTANT. Salary within A.P.T. Grade I (£575 to £725 per annum). Applicants must have passed the Intermediate Examination of the Royal Institute of British Architects.

(b) ARCHITECTURAL DRAUGHTSMAN. Salary within Miscellaneous Divisions 4-5 (£565 to £685 per annum).

The appointments which are on the temporary staff are subject to one month's notice on either side and to the passing of a medical examination.

Canvassing will disqualify.

Applications in writing, stating age, experience, qualifications and appointments held should reach the City Architect, Municipal Offices, Exeter, not later than the 7th MAY, 1959.

BOROUGH OF ENFIELD.

BOROUGH ENGINEER'S DEPARTMENT.

Applications are invited for established posts within the Grades shown:—

(a) ARCHITECTURAL ASSISTANT. A.P.T. I and II (£575-£845 per annum).

(b) ARCHITECTURAL ASSISTANT (MAINTENANCE). A.P.T. I (£575-£725 per annum).

A London Weighting allowance of £10-£30 per annum, according to age, will be paid in addition to the above salaries. The commencing salary will be in accordance with qualifications and experience.

Saturday mornings are normally free of duty.

Application forms, returnable by the 13th MAY, 1959, to be obtained from H. Deryck Peake, M.Sc. (Eng.), M.I.C.E., Borough Engineer and Surveyor, "Percy House," 7 Little Parkgardens, Enfield, Middx.

CYRIL E. C. R. PLATTEN, LL.B.,
Town Clerk.

Public Offices,
Enfield,
Middx.

CIVIL SERVICE.

QUANTITY SURVEYORS and ASSISTANT QUANTITY SURVEYORS Required by Admiralty, War Office, Air Ministry, Ministry of Works, Ministry of Education and Department of Scientific and Industrial Research, in most parts of United Kingdom and occasionally overseas. Although unestablished, these posts have long term possibilities. London salaries for those suitably qualified and experienced over 25 years of age, range from £830 to £1,300 per annum. Vacancies also exist for QUANTITY SURVEYING ASSISTANTS and others having some experience in Quantity Surveying at salaries ranging from £350 per annum upwards. Write quoting reference J.Q.S. to Room 403, M.L.N.S., Technical and Scientific Register (J), 26 King-street, London, S.W.1.

ENGINEERING

ASSISTANT Required by the Ministry of Transport and Civil Aviation for its Highways Engineering staff in its Materials and Soils Testing Laboratory at Hendon. Salary £722 at age 28 or over, rising by annual increments to £900 (subject to reduction of one increment of approximately £30 for every year below age 28). The appointment is a temporary one (i.e. non-pensionable) but of indefinite duration and opportunities of competing for permanency may occur later. Preference will be given to candidates who have obtained the O.N.C. or C. and G. Certificate or are of equiv. technical standard. Write giving age, full details of exp. and quals. to Ministry of Labour & National Service (PE.853), Professional and Executive Register, Atlantic House, Farringdon-street, London, E.C.4.

CITY OF CAMBRIDGE.

Amended Advertisement.

ASSISTANT ARCHITECT
(Special Grade £750-£1,030).

Applications are invited for this superannuated post in the Architects' Section of the City Surveyor's Department, in which there is a programme of major schools, housing and general works.

Applicants must have passed parts I and II of the R.I.B.A. Final or Special Final Examination or equivalent, and entry point on the grade will depend on experience.

Application forms from the City Surveyor, The Guildhall, Cambridge, to be returned by 14th MAY, 1959.

The Council may be able to provide housing accommodation.

ALAN H. I. SWIFT,
Town Clerk.

The Guildhall,
Cambridge.
18th April, 1959.

COUNTY COUNCIL OF ROSS AND CROMARTY.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited from qualified Architects for appointments as SENIOR ASSISTANT ARCHITECTS in the Dingwall Office of the County Architect on a salary scale £1,005-£1,200.

Applicants must be Associates of the Royal Institute of British Architects with experience in school design.

Applications giving details of training and experience with attached copies of three recent testimonials, should be lodged with the County Architect, Peter S. Leask, A.R.I.B.A., A.M.T.P.I., Tulloch-street, Dingwall, not later than SATURDAY, 9th MAY, 1959.

W. D. ROSS,
County Clerk.

County Buildings,
Dingwall.
April, 1959.

LONDON COUNTY COUNCIL.

ARCHITECT'S DEPARTMENT.

Vacancies exist in Quantities Division of Architect's Dept. for:—

(A) QUANTITY SURVEYING ASSISTANTS with not less than 3 years' experience in an approved office and with Inter. R.I.C.S. qualification to undertake duties in the several branches of the division. Salary up to £860 according to experience.

(B) TECHNICAL ASSISTANTS experienced in Working-Up. Salary up to £12 8s. weekly.

Application form and particulars from Hubert Bennett, F.R.I.B.A., Architect to Council, Ref. AR/EK/12/59, County Hall, S.E.1. (209.)

COUNTY BOROUGH OF BURNLEY.

Applications are invited for the following appointments in the Borough Engineer and Surveyor's Department.

SENIOR QUANTITY SURVEYING ASSISTANT, Special Grade (b) (£750-£1,030 p.a.).

Applicants should hold appropriate qualifications and have had experience in a Municipal Office.

QUANTITY SURVEYING ASSISTANT, Grade I (£575-£725 p.a.).

Applicants should have a sound knowledge of building construction and experience in the preparation of Quantities and Measurement of Building work is essential.

PROVISION OF HOUSING ACCOMMODATION MAY BE CONSIDERED IF REQUIRED.

Forms of applications and conditions of service may be obtained from the Borough Engineer and Surveyor, 22-24 Nicholas-street, Burnley, to whom applications should be returned not later than noon on SATURDAY, 9th MAY, 1959.

C. V. THORNLEY,
Town Clerk.

CITY OF YORK.

Applications are invited for the permanent appointment of SENIOR ASSISTANT ARCHITECT (General Section) (A.P.T. Grade IV £1,025-£1,175).

Applicants must be members of the R.I.B.A. and should have experience in the handling of building contracts. Commencing salary will be in accordance with experience and qualifications.

Details of appointment and Application Forms may be obtained from the undersigned, to whom completed forms must be returned not later than first post on 9th MAY, 1959.

E. FIRTH,
F.R.I.B.A., A.M.T.P.I.,
City Architect.

8 St. Leonard's-place,
York.
April, 1959.

CITY ARCHITECT'S OFFICE, MANCHESTER.

Applications invited for appointment on the permanent staff of DISTRICT BUILDING SURVEYOR (A.P.T. II, £725 to £845 per annum). Applicants must have passed the Building Surveyors' Examination of the R.I.B.A., the Building Inspectors' Examination of the Institution of Municipal Engineers, or hold equivalent qualifications, be conversant with the Model Building By-laws, and have a knowledge of the Factories and Public Health Acts and have had experience in the supervision of building works and the treatment of dangerous buildings. Housing accommodation for a limited period may be provided. Five-day week. Removal expenses allowed. Forms of application from the City Architect, P.O. Box 488, Town Hall, returnable by 3rd MAY, 1959.

BOROUGH OF MIDDLETON.

APPOINTMENT OF SENIOR CLERK OF WORKS.

Applications are invited from qualified persons for the above appointment at a salary within A.P.T. II, £725 to £845 p.a. or as CLERK OF WORKS at a salary within Miscellaneous Grade V, £625 to £685.

The successful applicant will be required to supervise the erection of houses on Corporation Estates and the appointment will be permanent, subject to Local Government Superannuation Scheme, and one month's notice on either side.

Applications suitably endorsed, stating age, experience and qualifications, together with names of two referees to be delivered to the undersigned not later than Noon on WEDNESDAY, 6th MAY, 1959.

Canvassing, directly or indirectly, will be a disqualification.

F. JOHNSTON,
Town Clerk.

Town Hall,
Middleton,
Nr. Manchester.
15th April, 1959.

BERKSHIRE COUNTY COUNCIL.

CLERK OF WORKS to supervise the ERECTION OF A NEW SECONDARY MODERN SCHOOL at Compton. Salary £14 14s. 0d. per week. Probable duration of work 1½ years. Candidates must have had practical experience on large building contracts. Preference will be given to those who have supervised the erection of new schools. Application forms and further particulars can be obtained from the County Architect, Wilton House, Parkside-road, Reading, to whom they should be returned completed by first post on TUESDAY, 5th MAY, 1959.

CITY OF WINCHESTER.

Applications are invited for the post of ARCHITECTURAL ASSISTANT in the City Engineer's Office (C. C. Steptoe, A.R.I.B.A., Chief Assistant Architect). It is essential that the applicant should be a neat and accurate draughtsman and have had previous experience in an architect's office. Salary, according to experience, will be within Grade I of the National Scales, and the appointment is subject to the Local Government Superannuation Act.

Applications, stating age and details of experience, together with the names and addresses of two referees, should be addressed to the City Engineer, Guildhall, Winchester, and should reach his office not later than MONDAY, 4th MAY, 1959.

Canvassing, either directly or indirectly, will disqualify.

R. H. McCALL,
Town Clerk.

Guildhall,
Winchester.
10th April, 1959.

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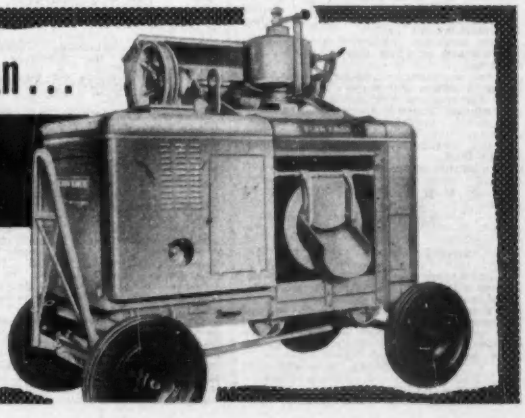

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COUNTY BOROUGH OF CROYDON.

TEMPORARY CLERK OF WORKS.

Applications are invited for this appointment from persons accustomed to housing contracts, including multi-storey flats. Salary £15 4s. per week, or £15 14s. if holding an approved qualification. Applications on forms obtained from the Borough Engineer, Town Hall, Croydon. Closing date 11th MAY, 1959.

E. TABERNER,
Town Clerk.

LONDON COUNTY COUNCIL.

CLERKS OF WORKS Required on multi-storey housing schemes to act in first instance as assistants. Commencing salaries £777 10s. to £852 10s. with scope for advancement to senior posts for men of ability. Applicants should possess sound knowledge of building construction, have served full trade apprenticeship and had experience in supervisory capacity on multi-storey housing contracts. Experience in reinforced concrete work an advantage.

Application form, returnable by 6th MAY from Architect, AR/EK/39/59, County Hall, London, S.E.1. (849.)

DEPARTMENT OF HEALTH FOR SCOTLAND.

CLERK OF WORKS.

The Architectural Division which covers building works at Scottish Prisons, Borstal Institutions and State managed hotels throughout Scotland, has vacancy in Edinburgh for a CLERK OF WORKS—BUILDING (non-pensionable post). Salary range £875-£1,035. Write Establishment Officer, Department of Health for Scotland, Room 30, St. Andrew's House, Edinburgh, 1, for application form. Closing date FRIDAY, 15th MAY, 1959.

CITY AND COUNTY OF KINGSTON UPON HULL.

CITY ENGINEER'S DEPARTMENT.

APPOINTMENT OF WORKS MANAGER.

Applications are invited for the APPOINTMENT AS WORKS MANAGER from properly qualified persons having a good practical knowledge of the construction and maintenance of various classes of public works, including building construction in all its branches.

The salary will be within Scale "B"—£1,305 x £60—£1,485 per annum, according to experience.

The duties include the general direction, supervision and control of the Departmental Workshops, employing bricklayers, plasterers, joiners, plumbers, painters, electricians, blacksmiths, heating engineers, motor mechanics, fitters, wheelwrights and coach builders—together with the labour and material for public works (excluding street works and sewers). The timekeeping, storekeeping, accountancy and costing work in connection with the Workshops will not be the responsibility of the Works Manager.

A List of Duties, together with the Form of Application, can be obtained from the undersigned.

Applicants should be professional men or craftsmen with technical knowledge and have had similar experience with a Local Authority or contracting firm. Experience of estimating, quantity surveying, drawings and specifications is essential.

The person appointed will act under the control and direction of the City Engineer and will be required to devote the whole of his time to the duties of the office. He will be required also to pass a medical examination; to serve satisfactorily a probationary period of six months (where applicable), following which the post will be a permanent one under the Superannuation Acts.

The question of providing housing accommodation will be considered.

Applications on forms to be provided, endorsed "Works Manager," and accompanied by copies of three recent testimonials, are to be addressed to the City Engineer and delivered at his office, Guildhall, Kingston upon Hull, not later than the 16th MAY, 1959.

Any applicant canvassing a member of the Council or Chief Official will be disqualified.

The successful candidate would be required to live within the City Boundary. The Corporation will consider making a contribution towards removal expenses.

WM. MORRIS, O.B.E., M.Inst.C.E., F.R.I.C.S.,
City Engineer and Surveyor.

Guildhall,
Kingston upon Hull.

METROPOLITAN BOROUGH OF WANDSWORTH.

SENIOR ASSISTANT ARCHITECT.

Applications invited for this post, Grade A.P.T. IV, £1,055 rising to £1,205. Applicants must be Associates of the R.I.B.A. with experience in design and planning of multi-storey blocks of flats and supervision of their erection. Forms obtainable from the Borough Engineer must reach me by 6th MAY.

J. NOEL MARTIN
Town Clerk.

Municipal Buildings,
Wandsworth, S.W.18.

YORKSHIRE ELECTRICITY BOARD.

HEAD OFFICE.

ARCHITECTURAL DRAUGHTSMEN

Applications are invited for the above POSTS in the Chief Engineer's Department.

The duties include the preparation of working drawings and details of operational and non-operational buildings.

Applicants should have a sound knowledge of Industrial and Commercial Building construction.

Salary—N.J.B. Schedule D, Grade 5, £790 x £20—£890 per annum.

Applications, giving full details of age, qualifications and experience, together with the names of two referees, should be forwarded to the Secretary, Yorkshire Electricity Board, Wetherby-road, Scarcroft, Nr. Leeds, not later than 8th MAY, 1959.

CORPORATION OF THE CITY OF GLASGOW.

HOUSING AND WORKS DEPARTMENT.

APPOINTMENT OF SUPERINTENDENT OF NEW WORKS (BUILDINGS).

Applications are invited for appointment to the above post, which falls vacant in JUNE, 1959. Salary scale £1,185 x £42 to £1,395, with placing according to experience. The post is superannuable, subject to the applicant's passing a medical examination.

The New Works Section is responsible, under the supervision of the Manager of the Housing and Works Department, for the construction of between 2,000 and 3,000 houses annually. Applicants should be experienced in the direction of large-scale housing projects and experience of multi-storey construction will be an advantage.

Applications, stating age and giving particulars of qualifications and experience and the names and addresses of three referees, should be received by me not later than 30th MAY, 1959.

WILLIAM KERR,
Town Clerk.

City Chambers,
Glasgow.

CITY OF SHEFFIELD.

CITY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments on the Staff of the City Architect, Mr. J. L. Womersley:—

(a) GROUP LEADER ARCHITECTS, Grade A.P.T. V (£1,175-£1,325).

(b) SENIOR ASSISTANT ARCHITECTS, Grade A.P.T. IV (£1,025-£1,175).

(c) ASSISTANT ARCHITECTS, Grade S.C. (£750-£1,030).

Architects with enthusiasm and determination are required to help rebuild this industrial hill city.

The above vacancies are for work in connection with large scale redevelopment schemes on which building work will commence early in 1960. There are excellent prospects of further work on interesting schemes of urban renewal.

Commencing salaries within the above grades according to qualifications and experience.

Applications from students completing full time courses this year will be considered for posts (c).

Applications stating post applied for, age, education and training, qualifications, present and past appointments (with dates and salaries), experience and the names of two persons to whom reference may be made should reach me not later than TUESDAY, 5th MAY, 1959.

JOHN HEYS,
Town Clerk.

Town Hall,
Sheffield, 1.

LINDSEY (LINCOLNSHIRE) COUNTY COUNCIL.

ARCHITECT'S DEPARTMENT.

Large and interesting programme of work requires the following on the permanent staff:—

(a) ONE SENIOR QUANTITY SURVEYOR, A.P.T. 4, £1,025-£1,175. Should be A.R.I.C.S.

(b) ONE ENGINEERING ASSISTANT (ELECTRICAL), A.P.T. II, £725-£845. Should have Section A or Joint Part I I.E.E. and capable of preparing drawings for electrical installations in buildings.

(c) ONE BUILDING INSPECTOR ASSISTANT (MAINTENANCE), A.P.T. I, £575-£725. Should be capable of preparing drawings and specifications for small works of alterations and additions.

Salary at starting point within the grade dependent upon qualifications and experience; N.J.C. Conditions of Service. Canvassing will disqualify. Candidates must disclose in writing whether to their knowledge they are related to any Member or Senior Officer of the Council.

Applications stating post applied for and salary required, giving age, qualifications, experience, present post and salary, and the names of at least two persons to whom reference can be made to be sent not later than 8th MAY, 1959, to the County Architect, County Offices, Lincoln.

COUNTY BOROUGH OF NORTHAMPTON.

Applications are invited for the following vacancies in the Borough Architect's Department:—

(a) ARCHITECTURAL ASSISTANT, A.P.T. II (£725-£845).

(b) TEMPORARY ASSISTANT CLERK OF WORKS, A.P.T. I (£575-£725).

Application forms, returnable by 5th MAY, and full details may be obtained from Borough Architect, Guildhall, Northampton.

C. E. VIVIAN ROWE,
Town Clerk.

COUNTY BOROUGH OF MIDDLESBROUGH.

Applications are invited for the following appointments in the Borough Engineer and Surveyor's Department.

(a) SENIOR ASSISTANT ENGINEER, A.P.T. IV (£1,025-£1,175).

(b) ASSISTANT ENGINEERS, A.P.T. III (£845-£1,025).

(c) SENIOR ASSISTANT ARCHITECTS, A.P.T. IV (£1,025-£1,175).

(d) ASSISTANT ARCHITECT, A.P.T. III (£845-£1,025).

(e) QUANTITY SURVEYOR, A.P.T. IV (£1,025-£1,175).

(f) TOWN PLANNING ASSISTANT, A.P.T. I (£575-£725).

Candidates must have appropriate qualifications and experience and starting salaries will be within the ranges accordingly. Housing accommodation will be considered for posts (a) to (e) if the circumstances of the candidates warrant it. Applications for forms quoting Ref. 8, to J. A. Kenyon, M.I.C.E., M.I.Mun.E., M.T.P.I., Borough Engineer, Municipal Buildings.

CITY OF SHEFFIELD.

Applications are invited for the post of PROPERTY INSPECTOR (Grade Miscellaneous V, £625-£685) on the staff of the Estates Surveyor, Mr. W. H. Rothwell, B.Sc., F.R.I.C.S.

Applicants should have practical experience of repairs to house property and other buildings and be capable of supervising work on site.

The post is superannuable, subject to N.J.C. conditions and to medical examination.

Applications, stating name, address, age, qualifications, experience, previous and present positions with dates and salaries and the names and addresses of two referees, should reach the undersigned not later than 6th MAY, 1959.

W. H. ROTHWELL,
Estates Surveyor.

Town Hall,
Sheffield, 1.

COUNTY BOROUGH OF WARRINGTON.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the undermentioned permanent appointments:—

(1) HIGHWAYS ASSISTANT. Within Special Scale (£750 rising to £1,030 per annum), with Car Allowance.

(2) ENGINEERING ASSISTANT. Within Special Scale (£750 rising to £1,030 per annum).

(3) PRINCIPAL ARCHITECTURAL ASSISTANT. Within Grade IV (£1,025 rising to £1,175 per annum).

(4) ARCHITECTURAL ASSISTANT. Within Grade II (£725 rising to £845 per annum).

Candidates for Appointments (1) and (2) must be Associate Members of the Institution of Civil Engineers and/or the Institution of Municipal Engineers, for Appointment (3) an Associate of the Royal Institute of British Architects, and for Appointment (4) have passed the Intermediate Examination.

Applicants for the position of Highways Assistant should have had considerable experience in road and sewer maintenance and construction.

Housing Accommodation will be made available, if required, in respect of appointments (1), (2) and (3).

The appointments, which are terminable by one month's notice on either side are subject to the conditions of service of the National Joint Council for Local Authorities Administrative, Professional, Technical and Clerical Services and the provisions of the Local Government Officers' Superannuation Act, 1937, the successful candidates (if new entrants to the Council's Service) being required to pass a medical examination.

The canvassing of members of the Council, either directly or indirectly will be a disqualification, and applicants must state whether to their knowledge they are related to any member of the Council, or any co-opted member of a Committee, or any Officer of the Council. Failure to do so will disqualify, or may lead to dismissal without notice.

No printed form of application is being used. Applications stating age, details of training and experience, qualifications, present and previous appointments (in chronological order) together with copies of three recent testimonials, or the names of three referees, should be forwarded to the undersigned so as to be received not later than 12 o'clock noon on MONDAY, the 11th MAY, 1959.

J. Y. HUGHES, M.I.C.E.,
Borough Engineer and Surveyor.

Town Hall,
Warrington.
15th April, 1959.

INVERNESS COUNTY COUNCIL

invite applications for the APPOINTMENT OF SENIOR ARCHITECTURAL ASSISTANT in the County Architect's Department; salary £1,005-£1,085 per annum with appropriate placing. Applicants must be Associate Members of the Royal Institute of British Architects. Housing accommodation may be made available if required. Applications together with names and addresses of three referees to the County Clerk, County Buildings, Inverness, by 30th APRIL, 1959.

BOROUGH OF WATFORD.

Applications are invited for the appointment of BUILDING INSPECTOR at a salary in accordance with Grade A.P.T. I (£575-£725).

Candidates should have had experience in a similar capacity and have a good knowledge of building by-laws and planning procedure. Preference will be given to persons holding the Building Inspector's Certificate of the Institution of Municipal Engineers.

Applications stating age, education, qualifications, experience, past and present appointments and giving the names of two referees should be sent to the undersigned to arrive not later than 5th MAY, 1959.

F. C. SAGE,
Borough Engineer and Surveyor.

Town Hall,
Watford.

COUNTY BOROUGH OF OLDHAM.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

APPOINTMENT OF SENIOR ARCHITECTURAL ASSISTANT.

Applications are invited from qualified persons for the above appointment which involves the design and carrying out of architectural works of major importance in the town, and the successful candidate will be offered a salary in the upper limits of the Special Classes Grade (£750-£1,030), in accordance with experience.

The National Conditions of Service and Local Government Superannuation Acts will apply and the appointment will be subject to a satisfactory medical examination.

Housing accommodation is available if required.

Applications endorsed "Senior Architectural Assistant," together with the names of two referees, should reach me not later than FRIDAY, the 8th MAY, 1959.

A. L. HOBSON,
Borough Engineer and Surveyor.

Municipal Buildings,
73 Union-street,
Oldham.

BIRMINGHAM REGIONAL HOSPITAL BOARD.

SENIOR ASSISTANT ARCHITECTS required, £1,050 to £1,245 per annum. Applicants must be registered architects having passed the requisite examinations. Experience of hospital planning and construction an advantage. Ability to control drawing-office staff essential. Superannuable. Apply giving details of training, present appointment and previous experience and naming three referees, to Secretary, 10 Augustus-road, Birmingham 15, by 11th MAY.

COUNTY BOROUGH OF OLDHAM.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

APPOINTMENT OF ARCHITECTURAL DRAUGHTSMAN.

Applications are invited for the appointment of ARCHITECTURAL DRAUGHTSMAN at a salary within Grade Miscellaneous V (£625 x £20-£685), commencing salary according to experience.

The successful applicant will be engaged in the Architectural Section of my Department and should be a competent draughtsman, capable of working up detail drawings and carrying out the measurement of land and buildings.

The National Conditions of Service and the Local Government Superannuation Acts will apply, and the successful candidate will be expected to pass a medical examination.

Applications endorsed "Architectural Draughtsman," together with the names of two referees, should reach me not later than FRIDAY, the 8th MAY, 1959.

A. L. HOBSON,
Borough Engineer and Surveyor.

Municipal Buildings,
73 Union-street,
Oldham.

LANCASHIRE COUNTY COUNCIL.

Applications are invited from qualified QUANTITY SURVEYORS with wide experience in preparation of Bills of Quantities for major projects of all types, and able to take charge from Taking-off to settlement of final accounts.

Permanent staff appointments in A.P.T. V (£1,175-£1,325). Starting point according to experience.

Application Forms, returnable by 30th APRIL, from the County Architect, P.O. Box 26, County Hall, Preston, reference A/T.B.

NEWCASTLE REGIONAL HOSPITAL BOARD.

REGIONAL ARCHITECT'S DEPARTMENT.

During the next two years the Board plans to spend several millions on hospital developments and larger programmes are being planned to follow. The present building programme includes a wide variety of projects, ranging from houses to hospitals, and (since a large hospital resembles a small town) affords ample opportunity for gaining both general and hospital experience simultaneously.

The following posts in the Regional Architect's Department are at present open to applicants. The salary scales quoted include interim increases pending completion of a current Health Service review of salaries.

(i) ASSISTANT ARCHITECTS (4). Salary £730 x £25 (2) x £30 (2) x £35 (5) x £40 (1)—£1,055.

Applicants should be registered architects and have had experience of the planning and construction of public buildings. The commencing salary will be fixed within the Grade by reference to relevant experience and to age.

(ii) ARCHITECTURAL ASSISTANT. Salary £545 at age 21 x £20 (3) x £25 (4) x £30 (2)—£765.

Applicants should have passed the Intermediate Examination of the R.I.B.A., or an examination recognised by the Institute as equivalent, and some practical experience is desirable.

The commencing salary within the grade will depend upon the applicant's age and practical experience, but will not exceed £605.

(iii) ARCHITECTURAL DRAUGHTSMAN. Salary £445 x £25 (5) x £30 (3)—£660.

Applicants should have had previous experience in an architect's drawing office and be neat and quick draughtsmen.

Evening study facilities are available at King's College of Durham University in Newcastle.

Applications, stating age, qualifications, past and present appointments, present salary and details of experience and training, together with the names of three referees (of whom at least two should be architects) should be forwarded to the Secretary to the Board, Benfield-road, Newcastle upon Tyne, 6, not later than 7th MAY, 1959.

CITY OF WAKEFIELD.

CITY ENGINEER'S DEPARTMENT.

Applications are invited for the following superannuable appointments:—

(A) SENIOR ASSISTANT ARCHITECTS (Posts Nos. 7 and 9). Grade A.P.T. IV (£1,025 x £50—£1,175).

Applicants must be A.R.I.B.A., and preference will be given to those having municipal experience.

(B) SENIOR ASSISTANT ENGINEERS (Posts Nos. 17 and 18). Grade A.P.T. IV (£1,025 x £50—£1,175).

Applicants must hold the Testamur of the Inst. Mun. E., and/or A.M.I.C.E., and must be experienced in the various branches of municipal engineering.

(C) JUNIOR ENGINEERING ASSISTANT (Post No. 21). Grade A.P.T. I (£575 x £30—£725).

Applicants must have completed a recognised period of training in a Municipal Engineer's Office; the appointed person will be allowed one day off per week if necessary for following a recognised course of study.

(D) ASSISTANT HEATING ENGINEER (Post No. 24). Special Grade (£750 x £40—£1,030).

Applicants should have had experience in the design and supervision of the various Heating installations for Schools and other Public Buildings, and preference will be given to holders of the Higher National Certificate.

(E) SENIOR TOWN PLANNING ASSISTANT (Post No. 29). Special Grade (£750 x £40—£1,030).

Applicants must be A.M.T.P.I. or hold an equivalent qualification, and must be experienced in Development Plan procedure and Redevelopment Schemes.

(F) TOWN PLANNING ASSISTANT (Post No. 29A). Grade A.P.T. II, III or Special.

Applicants must have had experience in a Town Planning office, and salary will depend on qualifications and experience.

(G) QUANTITY SURVEYING ASSISTANTS (Posts Nos. 35 and 36). Grade A.P.T. I (£575 x £30—£725).

Applicants must have had experience in a Quantity Surveyor's office, and preference will be given to those who are studying for the Intermediate Examination of the R.I.C.S. or equivalent. Persons appointed will be allowed up to one day off per week if necessary for following a recognised course of study.

Housing accommodation will be provided in respect of appointments (A), (B), (D) and (E).

Applications stating number of position applied for, age, training, qualifications, experience, and the names of two referees, should be sent to the City Engineer, Town Hall, Wakefield, by WEDNESDAY, the 6th MAY, 1959.

BEDFORDSHIRE

COUNTY COUNCIL invite applications for HEATING ENGINEERING DRAUGHTSMAN. Salary £725-£845 p.a. Applicants must have sound experience in preparation of drawings for heating and hot water installations, etc., for Schools and Public Buildings. Application forms from County Architect, Shire Hall, Bedford, to be returned by 4th MAY.

RUISLIP - NORTHWOOD URBAN DISTRICT COUNCIL.

Applications are invited for the undermentioned appointments:—

(a) PROPERTY MAINTENANCE FOREMAN.

(b) PROPERTY MAINTENANCE CLERK.

The salary in each case is £655 per annum, rising by £20 increments to £715 p.a. The posts are subject to the National Scheme for Miscellaneous Classes of Officers, and the L.G. Superannuation Acts. 5-day, 44-hour week.

Application forms, obtainable from the Engineer and Surveyor, to be returned by MONDAY, 11th MAY, 1959.

EDWARD S. SAYWELL,
Clerk of the Council.

Council Offices,
Northwood,
Middx.

ESHER URBAN DISTRICT COUNCIL.

ENGINEER AND SURVEYOR'S DEPARTMENT.

BUILDING CLERK OF WORKS—GRADE A.P.T. II.

Applications are invited for the above mentioned appointment at a salary up to £875 per annum including London Weighting Allowance, the commencing point being according to qualifications and experience.

Applicants should have had previous experience as a Local Authority Clerk of Works on the erection of domestic buildings and be suitably qualified. This appointment, although temporary, is expected to last a minimum of two years.

Form of application and further particulars can be obtained from the Engineer and Surveyor, Council Offices, Esher, to whom applications must be delivered not later than the 11th MAY, 1959.

FREDERICK EDWARDS,
Clerk of the Council.

Council Offices,
Esher.
Surrey.
16th April, 1959.

CARMARTHENSHIRE COUNTY COUNCIL.

ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments:—

(a) ASSISTANT ARCHITECT.
Salary Grade, Special Scale. £750-£1,030 per annum.

(b) ARCHITECTURAL ASSISTANT.
Salary Grade, A.P.T.I. £575-£725 per annum.

Candidates for post (a) must be A.R.I.B.A., and those for post (b) must have passed the Intermediate Examination of the R.I.B.A.

Details of qualifications, experience and present salary, with copies of three recent testimonials to County Architect, County Hall, Carmarthen, not later than SATURDAY, 2nd MAY, 1959.

W. S. THOMAS,
Clerk of the County Council.

County Hall,
Carmarthen.
April, 1959.

CITY AND COUNTY OF BRISTOL.

HOUSING COMMITTEE.

Applications invited for post of TECHNICAL ASSISTANT. Salary: Special N.J.C. Scale, £750-£1,030.

Applicants must have passed Final Examination of Royal Institution of Chartered Surveyors (Building) or hold a similar qualification and be experienced in preparation of plans, specifications and estimates, particularly in connection with adaptation and improvement of existing buildings. Knowledge of procedure in relation to improvement grants an advantage.

Application forms, returnable by first post on 6th MAY, from Housing Manager, Council House, Bristol, 1.

BOROUGH OF NEWCASTLE UNDER LYME

requires a SENIOR ASSISTANT QUANTITY SURVEYOR in the Borough Engineer and Surveyor's Department. Salary in A.P.T. III according to qualifications and experience (£845-£1,025).

Applicants will be required in connection with Taking-off for new Schools and Housing contracts. Favourable consideration will be given to the provision of housing accommodation in suitable cases.

Application forms and conditions of appointment may be obtained from the Borough Surveyor, Lancaster Building, High-street, Newcastle, Staffordshire, and must be returned to him not later than WEDNESDAY, 6th MAY, 1959.

C. J. MORTON,
Town Clerk.

GENERAL FOREMAN

required by Camberwell Borough Council to take charge of two adjacent sites with a total of 66 flats in three-storey blocks and ancillary buildings. Applicants must have extensive experience in flats construction. Write giving full details of age, trade and recent contracts and names of two referees to Town Clerk, Town Hall, S.E.5. Salary up to £1,600 p.a. according to experience.

COUNTY COUNCIL OF ESSEX.

ASSISTANT ARCHITECTS.

For the extensive development in this County, a large programme of public building work is in progress. ASSISTANT ARCHITECTS are required who are interested in taking part in the design and building of HEALTH CENTRES AND CLINICS, AMBULANCE, FIRE AND POLICE STATIONS, LIBRARIES, COLLEGES AND SCHOOLS.

Previous Local Government experience not essential.

Applications from students in their fifth year considered and interviews arranged at convenient times.

Salaries from £750 to £1,030 (under review).

Forms of applications from County Architect, County Hall, Chelmsford, Essex.

ARCHITECTURAL AND SURVEYING ASSISTANT.

Croydon and West Kent Headquarters at Croydon, South Eastern Electricity Board.

Salary £640-£700 per annum plus London Weighting under N.J.C. Agreement, Grade 2. Superannuable. Applications quoting BLDR and naming two referees on forms from Croydon and West Kent Manager, Seeboard, Wellesley-road, Croydon, by 6th MAY, 1959.

CARSHALTON URBAN DISTRICT COUNCIL.

ARCHITECTURAL ASSISTANT, ENGINEER AND SURVEYOR'S DEPARTMENT.

Must hold Final Examination Certificate of the R.I.B.A., and be a Registered Architect. Must also be competent in design and construction and have had a full and varied practical experience, preferably in the architectural work of a local authority.

Carshalton is a large urban district of 62,000 population with a development programme which includes multi-storey flats and other building works.

Salary will be within the A.P.T. Special Scale (£750 to £1,030) per annum plus London "Weighting."

Applications on forms obtainable from the undersigned must be returned with names of three referees not later than the 18th MAY, 1959. Canvassing will disqualify.

C. H. DURRANT,
Clerk of the Council.

District Council Offices,
The Grove,
Carshalton, Surrey.

PETERLEE DEVELOPMENT CORPORATION.

CHIEF ARCHITECT'S DEPARTMENT.

APPOINTMENT OF ASSISTANT QUANTITY SURVEYOR.

Applications are invited for the following:—

ASSISTANT QUANTITY SURVEYOR (on the Corporation's Salary Grade V, £844-£1,029).

Applicants must be up to the intermediate standard required by the Royal Institution of Chartered Surveyors.

The appointment is superannuable and subject to the Corporation's Conditions of Service, and will be terminable by one month's notice on either side. The successful applicant will be required to pass a medical examination.

Housing accommodation will be available if necessary.

Applications stating age, experience, qualifications and giving the names of two persons to whom reference can be made should reach the undersigned not later than TUESDAY, 28th APRIL, 1959.

A. V. WILLIAMS,
General Manager.

Shotton Hall,
Old Shotton,
Peterlee,
Horden,
Co. Durham.

PADDINGTON GROUP HOSPITAL MANAGEMENT COMMITTEE.

Applications are invited for the post of BUILDING SUPERVISOR in Superintendent Engineer's Department with experience in preparing specifications and drawings for maintenance and minor new works. Capable of controlling labour and negotiating with contractors.

Salary in accordance with Whitley Scale for Multi-Unit Group 40½-50 points —£810 x £25(3) x £30(2)-£945 p.a. plus London Weighting.

Applications stating age, experience, qualifications, present position, together with the names of two referees to reach the Secretary, Paddington Group Hospital Management Committee, Harrow-road, W.9, by 4th MAY, 1959.

PRISON COMMISSIONERS

require ARCHITECT (unestablished post) in Prison and Borstal Service, based on London. Candidates must be qualified architects with good professional experience. Duties, mainly design, for all types of buildings. Salary scale £805-£1,260 p.a. Forms from M.L.N.S. Technical and Scientific Register (K), 26 Kingsteet, London, S.W.1, quoting J.153/9A. Closing date for applications 15th MAY.

OXFORDSHIRE COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the following:

(a) ASSISTANT QUANTITY SURVEYOR, A.P.T. Grade III (£845-£1,025).*

(b) ASSISTANT QUANTITY SURVEYOR, A.P.T. Grade II (£725-£845).*

(c) ASSISTANT QUANTITY SURVEYOR, A.P.T. Grade I (£575-£725).*

(d) QUANTITY SURVEYOR'S ASSISTANT, Misc. Grade V (£625-£685).*

(e) JUNIOR ASSISTANT, General Division (£200-£450)* or Higher General Division (£230-£560).*

* Subject to new award.

Applicants for appointment (a) must have passed a suitable professional final examination, (b) and (c) must have passed the appropriate Intermediate Examination, and for (d) must have experience in abstracting, billing, interim valuations and final accounts.

Applications giving two referees and one recent testimonial, must give details of qualifications, education, experience, age and relevant particulars, must reach the County Architect, Park End-street Offices, Oxford, not later than the 14th MAY, 1959.

GERALD GALE BURKITT,
Clerk of the Council.

County Hall,
Oxford.

BOROUGH OF WALTHAMSTOW.

ASSISTANT CLERK OF WORKS (TEMPORARY).

Applications are invited for the above appointment in the Borough Architect, Engineer and Surveyor's Department (F. G. Southgate, A.R.I.B.A., M.I.Mun.E., A.M.T.P.I.) at a salary in accordance with Grade A.P.T. I (£575 to £725 per annum, exclusive of London Weighting) with the commencing salary according to experience.

Applicants should have a thorough knowledge of the building trade and be capable of supervising large housing contracts.

Applications, stating age, experience and present occupation, together with the names of two referees, one of whom should be the present or former employer, are to be received by the undersigned not later than noon on FRIDAY, 8th MAY, 1959, endorsed "Assistant Clerk of Works."

G. A. BLAKELEY,
Town Clerk.

Town Hall,
Walthamstow, E.17.
17th April, 1959.

FLINTSHIRE COUNTY COUNCIL.

Applications are invited for an ASSISTANT ARCHITECT. Candidates must be Associates of the R.I.B.A. and have had substantial experience in an Architect's office since passing the Final Examination and be conversant with the design of schools. Salary special scale £750-£1,030 per annum. Form of application from Clerk of County Council, County Buildings (P.O. Box No. 1), Mold. Closing date 11th MAY, 1959.

BOROUGH OF BEDDINGTON AND WALLINGTON, CLERK OF WORKS

required to supervise the erection of 42 flats at Beddington Corner, Surrey, commencing June/July, 1959. Salary up to £18 0s. 0d. per week. Applications stating age, experience and training to Pite, Son and Fairweather, Chartered Architects, 6 Queen Anne's-gate, Westminster, S.W.1, by the 11th May, 1959.

BOROUGH OF CHESTERFIELD.

WORKS MANAGER.

Applications invited for position of WORKS MANAGER. Salary in accordance with Grade "C" of the National Scheme of Conditions of Service for Chief Officers, i.e. £1,385 per annum, rising to £1,620 per annum by three annual increments of £60 and one of £55. Works Manager is a Chief Officer responsible directly to Works Committee. Duties will include building maintenance of Corporation properties and the building of houses by direct labour. Candidates must have initiative, good organising ability, experience in all sections of the building industry, be competent to take off quantities and prepare estimates, have a knowledge of present-day purchasing, and experience in control of workmen. Previous experience in similar work with a Local Authority would be an advantage. Housing accommodation on a rental basis will be provided if required for period not exceeding two years.

Applications in writing, giving age, full particulars of experience and names of three referees to Town Clerk, Town Hall, Chesterfield, in sealed envelope marked "Appointment of Works Manager" not later than 6th MAY, 1959.

RICHARD CLEGG,
Town Clerk.

20th April, 1959.

CWMBRAN DEVELOPMENT CORPORATION.

APPOINTMENT OF ASSISTANT QUANTITY SURVEYOR.

A QUANTITY SURVEYOR is required for varied and interesting work in connection with the development of Cwmbran New Town, on the Salary Scale £934-£1,146, the point of entry being in accordance with qualifications and experience.

Candidates should be experienced in taking-off, billing and abstracting, site measurements, valuation of work and the preparation of final accounts.

The post is superannuable and housing accommodation will be made available in suitable cases.

Applications stating age, experience, details of present and former employment (together with applicable salaries) and the names and addresses of two referees must reach the undersigned by first post on MONDAY, 11th MAY, 1959.

J. C. P. WEST, A.R.I.B.A., M.T.P.I., Chief Architect.

Victoria-street,
Cwmbran,
Mon.

OVERSEAS PUBLIC APPOINTMENTS

A MAINTENANCE OFFICER is Required at UNIVERSITY COLLEGE, IBADAN, NIGERIA. Applicants should either be Members of the Institute of Builders or hold recognised national certificate or have other recognised training. Salary scale: £1,150 x £50—£1,400 p.a. Entry point dependent on qualifications and experience. Passages paid for appointee, wife and three children under 11 years on appointment, overseas' leave, and termination. Part furnished accommodation at rent not exceeding 7.7 per cent. of salary. Children's, car, and outfit allowances. Pension scheme. Detailed applications (six copies) naming two referees by 10th JUNE, 1959, to Secretary, Inter-University Council for Higher Education Overseas, 29 Woburn-square, London, W.C.1, from whom further particulars may be obtained.

KUMASI COLLEGE OF TECHNOLOGY.

(Principal: W. E. Duncanson, Ph.D., D.Sc., F.Inst.P., A.M.I.E.E.)

Applications are invited for the post of—

LECTURERS IN TOWN PLANNING in the School of Architecture, Town Planning and Building.

The School prepares students for Intermediate Examinations of the R.I.B.A. and of the T.P.I., and negotiations are at present in progress between the School and various bodies in London concerning the Building Technology course for which it is hoped to make similar arrangements.

Qualifications: A.M.T.P.I., at least 3 years' practical experience and preferably at least 1 year's teaching experience.

Appointment accepted on contract for 5 years or on pension, or the College will be prepared to take over and maintain employers' contributions to former F.S.S.U. policies.

Contract salary scale: £1,230 x £60-£1,950 p.a. plus gratuity payable at end of contract at the rate of £12 10s. for each month of satisfactory service. Pensionable and F.S.S.U. salary scale: £925 x £50-£1,625. Point of entry according to experience.

Children's allowances up to a maximum of three at rate of £50 p.a. per child up to 10 years and £100 p.a. per child over 10 years in full-time education up to 21 years. Annual leave with free return first-class passages for member of staff, his wife and up to three children under 17 years. Bungalows with basic furniture at low rental provided. Income tax low.

Applications (6 copies) giving age, qualifications, experience and the names of 3 referees should be sent to the Council for Overseas Colleges, 12 Lincoln's Inn Fields, London, W.C.2. Closing date 14th MAY, 1959.

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MARLEY MAGNA
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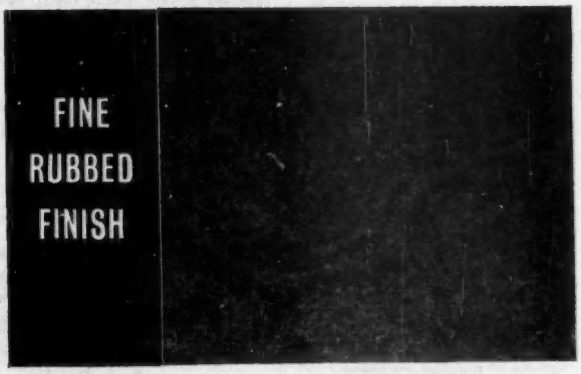

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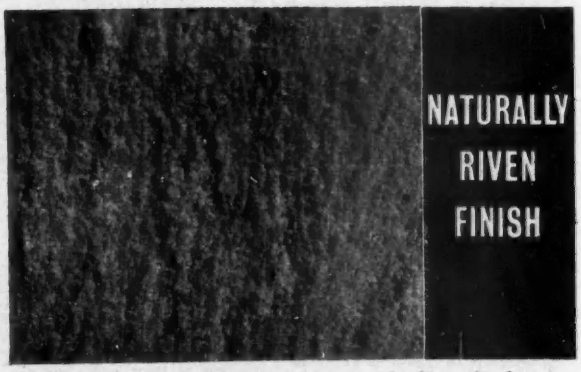

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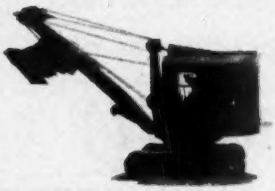

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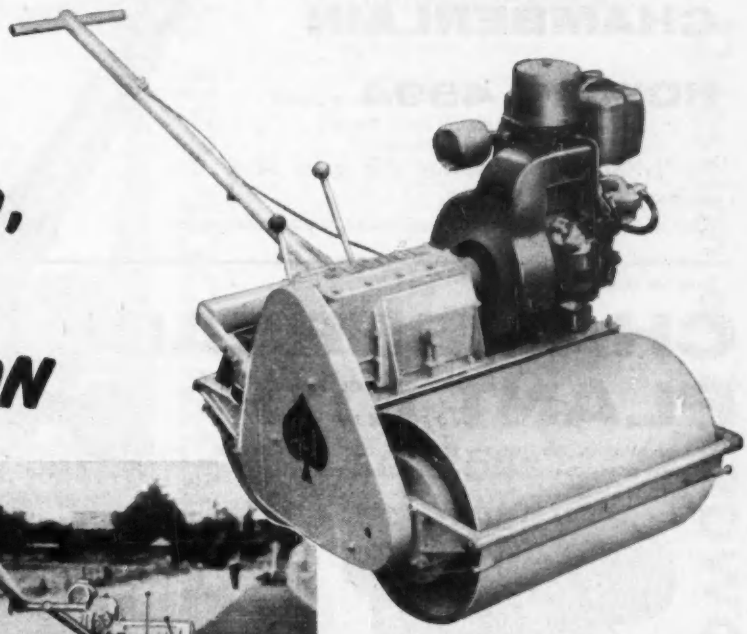

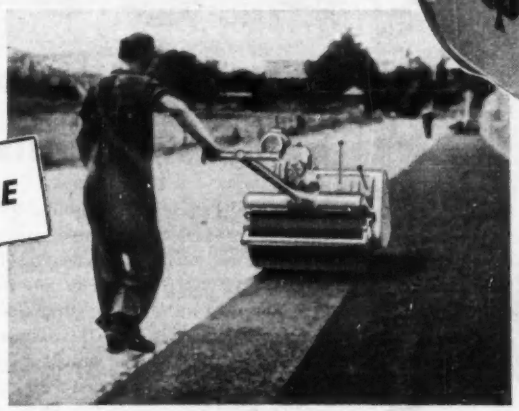

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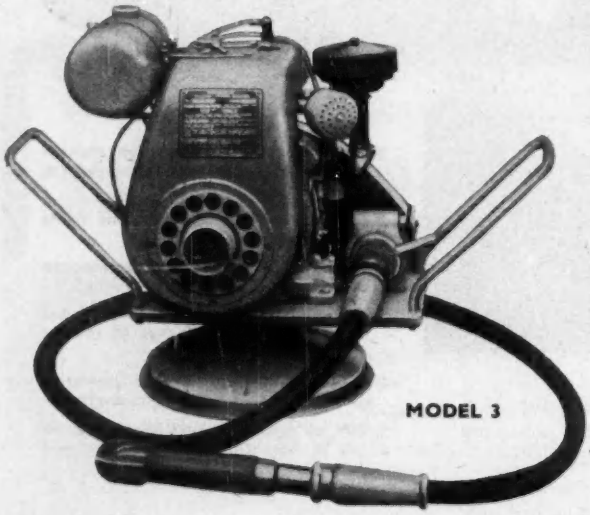

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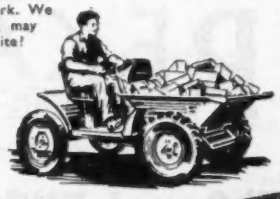

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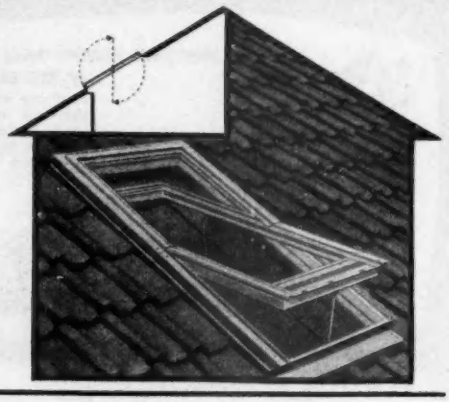

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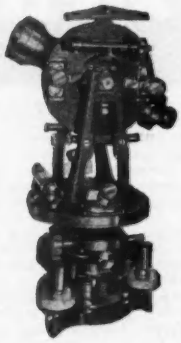

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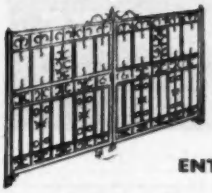

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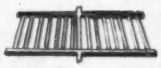

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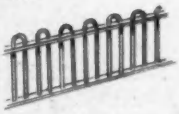

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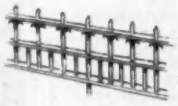

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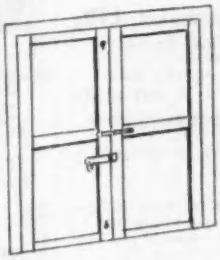

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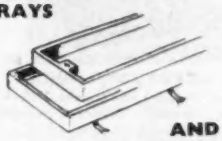

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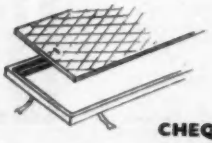

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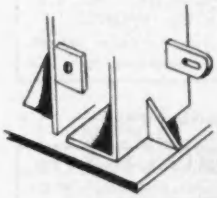

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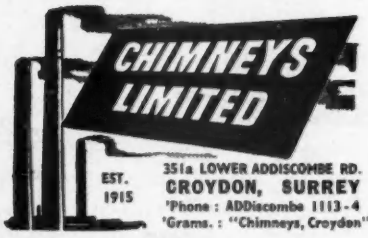

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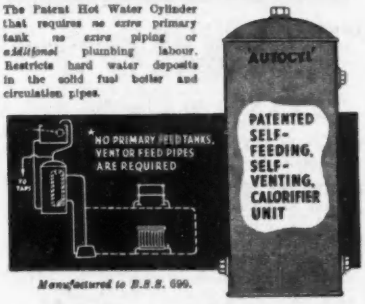

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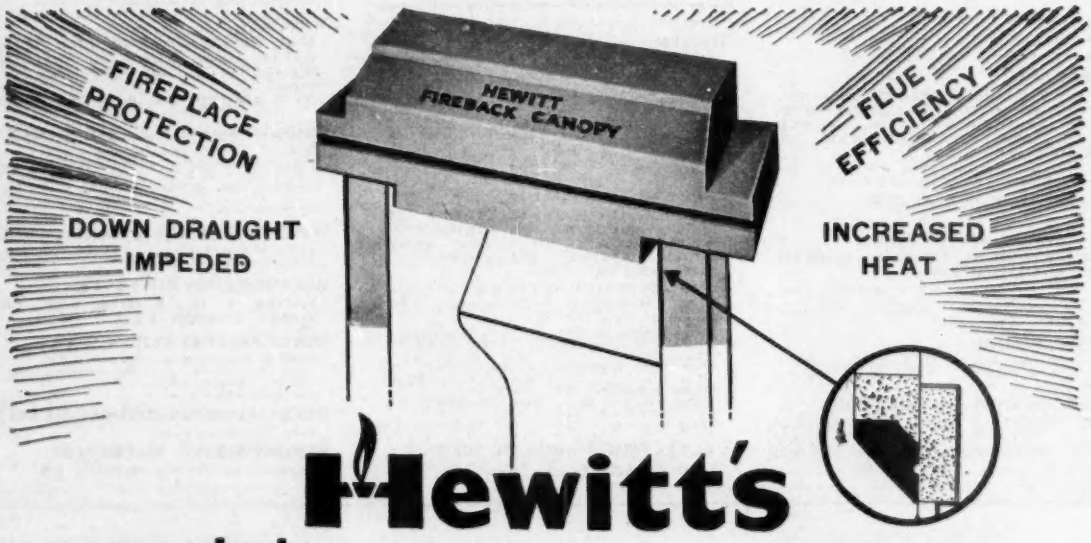

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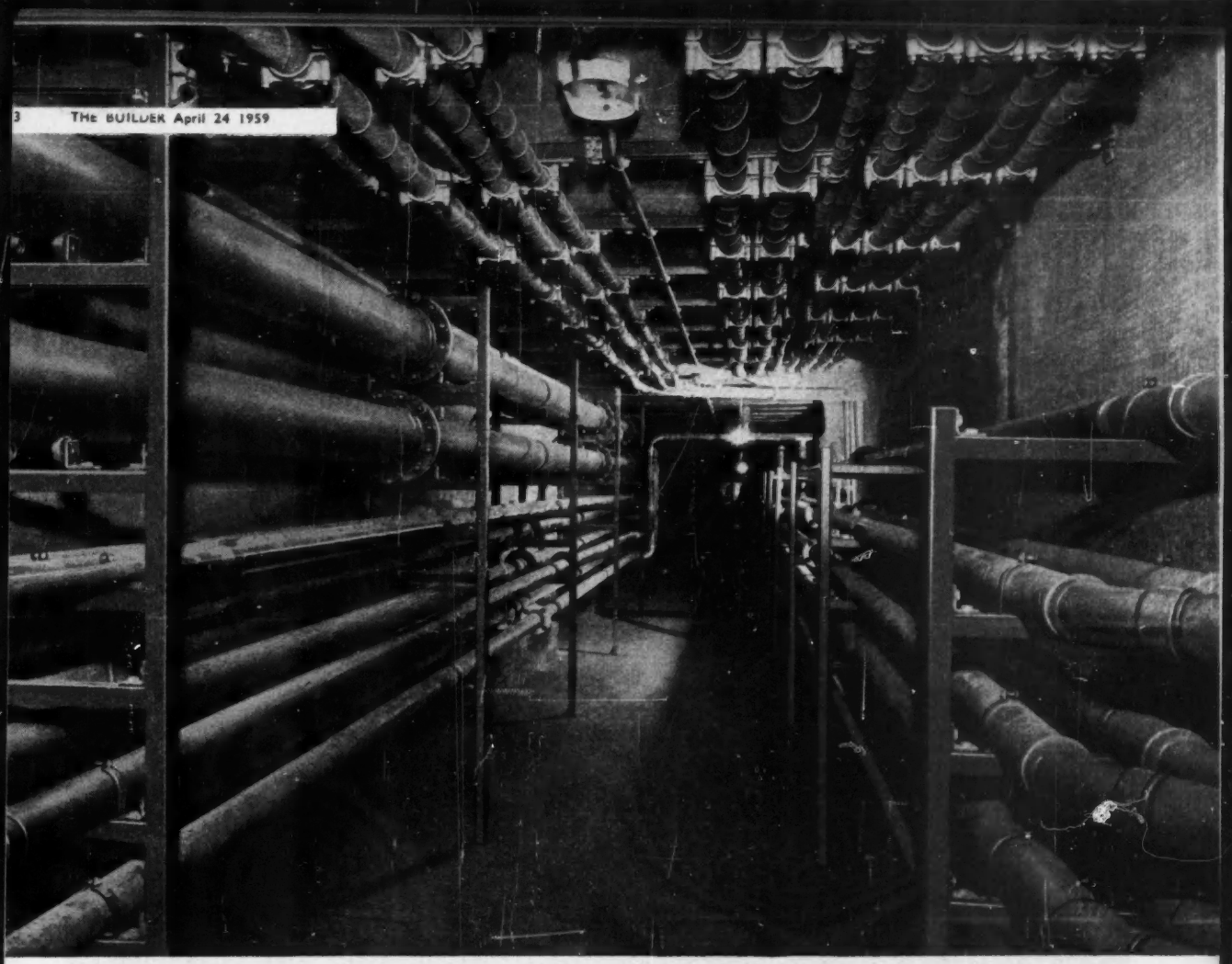

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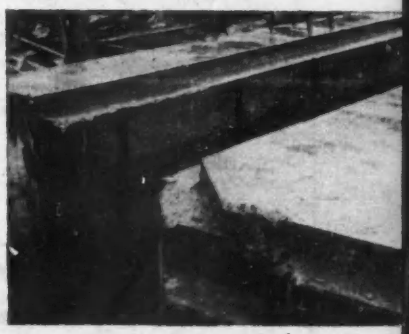

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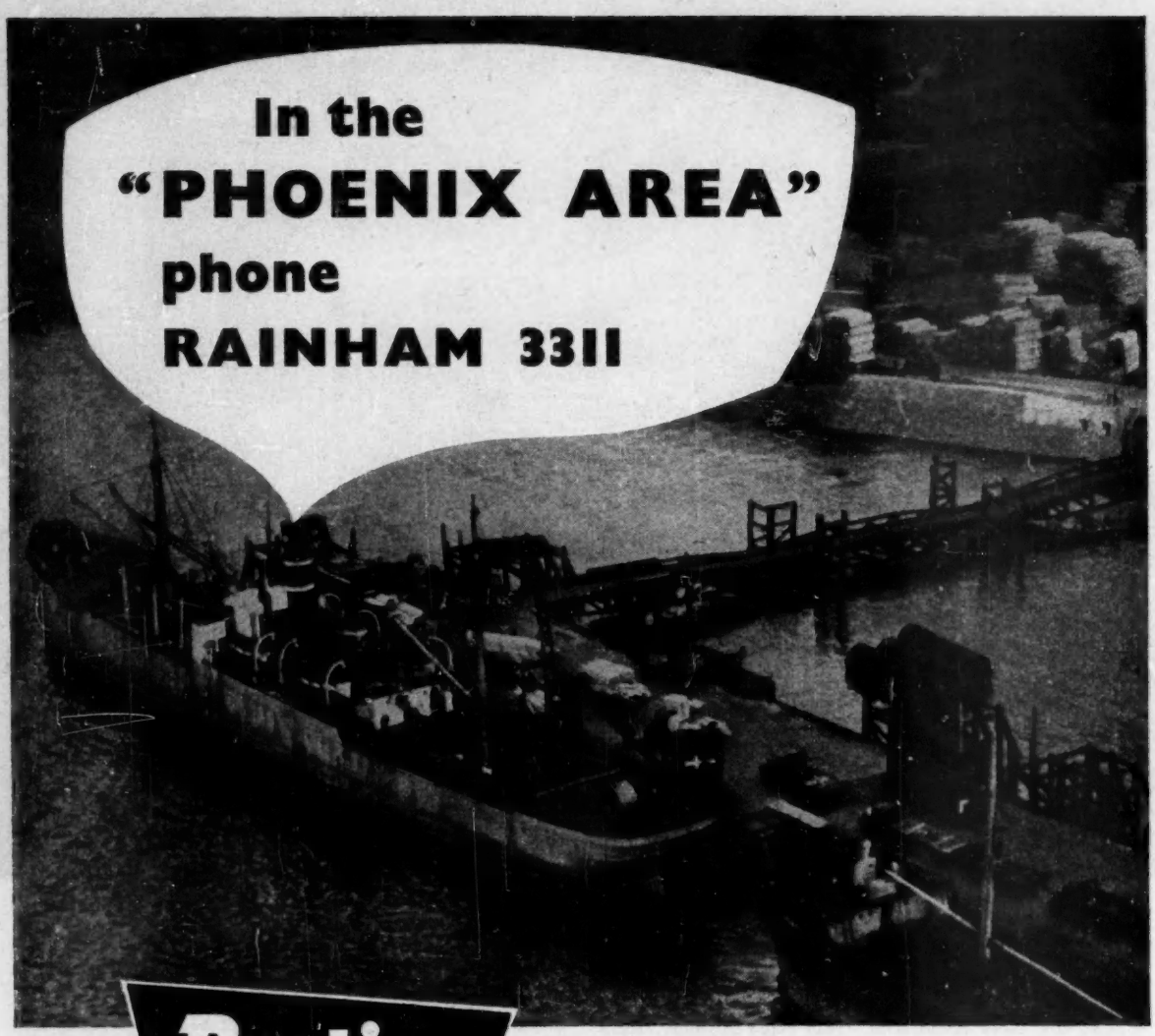

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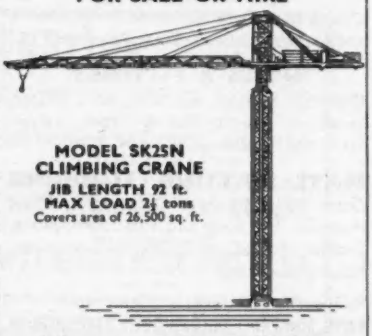

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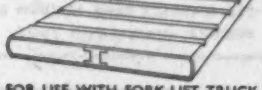

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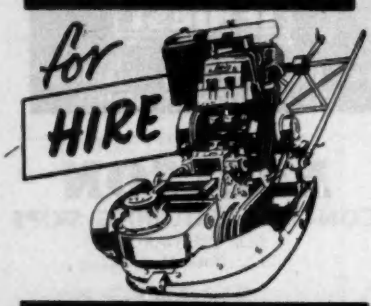

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SENIOR WORKER-UP Required by London Quantity Surveyors in Holborn area. Salary £1,000 per annum. Five-day week. Pension and Life Assurance Scheme.—Box 199, "The Builder."

CAPABLE WORKER-UP Required in London Chartered Quantity Surveyors' office. Appointment with prospects of advancement according to capability. Apply in writing stating age, office and examination experience and salary required to Box 956, "The Builder."

THREE ASSISTANT WORKERS-UP Required, high salary offered to applicants with necessary experience.—Apply in confidence, giving full details, to Box 198, "The Builder."

WORKER-UP, with three to five years' professional experience, Required by F. S. SNOW & PARTNERS. 5-day week, luncheon vouchers, superannuation.—Apply in writing to 87 Charing Cross-road, London, W.C.2, stating age, experience, qualifications and salary required.

WORKER-UP Required by medium-size progressive West End Chartered Quantity Surveyors engaged on U.K. and West Indies contracts. Prospects of advancement according to capability.—Write giving experience, and salary required, to Box 986, "The Builder."

WORKER-UP Required for London office, including measuring on site; 5-day week.—Please write stating age, experience and salary required, Box 268, "The Builder."

CHIEF WORKER-UP Required.—Please write WAKEMAN, TROWER AND PARTNERS, Quantity Surveyors, St. Paul's House, St. Paul's-street, Leeds, 1.

PROGRESS AND PLANNING ENGINEER, age 35-40 years, with practical and administrative experience. Required operate mainly London area.—Details of experience, qualifications (if any) and salary requirements to Company Planning Engineer, Y. J. LOVELL & SON, Ltd., Gerrards Cross, Bucks.

WORKS STUDY OFFICER Required by WATES, Ltd. Previous experience in building industry essential. Excellent salary, bonus, superannuation.—Write stating age, training experience and present salary to Personnel Manager, 1,258-60 London-road, Norbury, S.W.16.

A. MONK & COMPANY, LIMITED, Require SITE ENGINEERS for major prospects in and around the Lincoln and Leicestershire areas, experience in High Quality reinforced Concrete Structures an advantage. Permanent and progressive posts. Superannuation Scheme in operation. Applications in confidence stating age, full details of experience and qualifications, etc. Applicants residing outside these areas, Subsistence Allowance under the terms and conditions of the Company's Rules would be payable. Please reply to Mr. W. S. Whittingham, A. MONK & COMPANY, LIMITED, P.O. Box No. 4, Stamford, Lincs.

BUILDING Contractors and Joinery Manufacturers Require ENGINEER for general design work. Interest in joinery an advantage, but not essential. Permanent position with Pension scheme.—Write full details, giving age, experience and salary required, to POCHIN Ltd., Middlewich, Cheshire.

OVE ARUP & PARTNERS have vacancies in London and Manchester for experienced STRUCTURAL ENGINEERS, DESIGNERS AND DETAILERS. Salary range £1,300-£700.—Please write giving full details of qualifications and experience to 8 Fitzroy-street, London, W.1.

CLERK OF WORKS Required for the supervision of a major industrial project in Birmingham. The contract has already started, and the engagement will be for at least 18 months' duration.—Applications for this post should be addressed to CLIFFORD TEE & GALE (Architects, London and Birmingham), 43 Frederick-road, Birmingham 15, telephone number Edgbaston 3676, and should include full particulars of experience and details of previous contracts on which the applicant has been engaged. Expenses incurred for the purpose of an interview will be reimbursed.

CLERK OF WORKS Required to supervise a comprehensive redevelopment scheme for the Borough of Woolwich, 14 Storey Tower Blocks, 4 Storey Maisonettes, Flats, Outbuildings (approx. value £600,000). Possible duration 24/30 months from June, 1959. Salary approx. £20 a week.—Application, giving age, full details of experience, salary required, and names of two referees, to: NORMAN & DAWBARN, Architects and Consulting Engineers, 7 Portland-place, W.1, by Monday, 27th April.

BIRMINGHAM. Energetic CLERK OF WORKS for multi-storeyed R.C. building. Salary £1,000.—TREHEARNE & NORMAN, PRESTON & PARTNERS, 83 Kingsway, London, W.C.2. (HOL 4071).

CLERK OF WORKS Required to supervise the construction of the National College for Heating, Ventilating, Refrigeration and Fan Engineering in Southwark (approximate value £250,000). Possible duration 12/13 months from July, 1959. Salary approximately £20 per week. Some experience of complicated mechanical services essential. Application giving age, full details of experience, salary required and names of two referees, to: NORMAN & DAWBARN, Architects and Consulting Engineers, 7 Portland Place, W.1, by Monday, 10th May.

TEMPORARY CLERK OF WORKS

Required by ALBERT E. REED & CO., LTD. to supervise contractors' work on industrial building and civil engineering projects at various sites in the British Isles. The post will be centred near Maidstone, but will involve considerable travelling so that an applicant with no personal ties would be preferred. A knowledge of survey instruments and survey is desirable. Car driver essential. Engagement for 9 months is assured in the first instance, after which permanency may be considered.

Apply in writing stating age, experience, qualifications and salary expected, to the

Personnel Officer,
Group Personnel Division,
ALBERT E. REED & CO., Ltd.,
Larkfield, nr. Maidstone, Kent.

quoting Ref. TCW/26.

CLERK OF WORKS

required for the reconstruction of an important retail shop building in the Stratford, E.15, area for the London Co-operative Society Ltd. Duration of contract two years. Only men experienced in substantial sized contracts, including foundation and structural work, should apply. Please state age, experience and salary required.

Box No. 228, "The Builder."

ESTIMATOR Required immediately. Capable of preparing tenders up to £100,000 and handling works from estimate to completion. Permanent position with excellent prospects. Apply stating age, reference and salary required to Box 157, "The Builder."

ESTIMATOR Required by substantial firm of building contractors. Must be fully experienced in estimating for medium to large contracts of all types. Good salary and conditions.—Apply in confidence, giving details of age, experience and salary required to H. FAIRWEATHER & CO., Ltd., Hyde Works, St. James's-lane, Muswell Hill, N.10.

ESTIMATOR with ability to price all types of joinery Required by Manufacturers, Cheshire. Excellent opportunity for person with initiative. Pension scheme.—Write full details of training and experience and state salary required, to Box 200, "The Builder."

HUMPHREYS LIMITED

199, Knightsbridge, London, S.W.7

require the following staff

ESTIMATORS

To assist Chief Estimator on a wide range of building and civil engineering work, must have had experience on substantial projects with reputable firms and be capable of producing detailed make-ups based on modern plant usage and techniques. Substantial salaries, good conditions, superannuation etc. for the right men.

Please give details of education, experience, when available, and salary required, in strictest confidence. Envelopes should be addressed to Personnel Department, Humphreys Ltd. and marked 'Private and Confidential.'

ESTIMATOR AND SURVEYOR Required by medium-sized Building and C.E. Contractors in S.E. Midlands area. Must be capable, keen and ambitious. Opportunity to become a Director exists. Apply, stating full details.—Box 201, "The Builder."

AN EXPERIENCED ESTIMATOR Required by a well-known Midlands shop-fitting company. This is an interesting and progressive appointment, and applicants should write giving full details of qualifications and experience, including salary required, to Box 202, "The Builder."

WALTER LILLY & CO., Ltd. Require an ESTIMATOR/SURVEYOR capable of pricing work up to £100,000 in their expanding Contracts Dept. The position offers opportunity for advancement in growing concern. Superannuation and bonus schemes in operation.—Write stating age, experience and training and salary expected, to The Manager, 8 St. Ann's-street, Westminster, S.W.1.

BUILDERS.—Old established East London Company have two vacancies: experienced ESTIMATOR and TAKER-OFF/DRAUGHTSMAN. Good salaries offered for both these posts.—Write full details Box 158, "The Builder."

ESTIMATOR/SURVEYOR Required with experience in Tendering for both medium and large building of all types of construction.—Apply with full details to F. G. MINTER, Ltd., 4 Buckingham-gate, S.W.1.

ESTIMATOR Required for specialist joinery and decorations. State age, experience and salary required.—Box 140, "The Builder."

ASSISTANT ESTIMATOR Required by the manufacturers of "Middlesex" Prefabricated Timber Buildings. Experience in Taking-off, scheduling, and sound technical knowledge essential.—Apply stating age, salary and experience to J. E. LESSER & SONS, Ltd., Green-lane, Hounslow. (HOU 7281-7.)

ESTIMATOR AND SURVEYOR with experience of mastic asphalte in buildings construction Required immediately. Excellent opportunity for youngish man with knowledge of the trade. Non-contributory pension scheme and luncheon vouchers.—Write stating age, experience and salary required to VAL DE TRAVERS, 21-22 Old Bailey, London, E.C.4. All applications will be treated in confidence.

ESTIMATOR/ SUPERVISOR

required for the London office of old established firm of Building Contractors. Must be conversant with modern building methods and experienced in pricing and controlling all types of contracts up to £500,000. This is a permanent pensionable post with excellent prospects and carries a good salary commensurate with experience.

Write giving full particulars of training and experience, age, and present salary, to

Box 203 "The Builder"

ASSISTANT ESTIMATOR/SURVEYOR (car driver), residing S.E. London or N.W. Kent, Required by old established builders. Age 25 or thereabouts, with sound technical background, preferably up to C. and G. standard in Q.S. and Estimating with experience in all classes of work. Contributory Pension Scheme. Existing holiday arrangements respected.—Apply, stating age, experience and salary required to Box 145, "The Builder."

ESTIMATOR: SENIOR Required for large Pre-cast Concrete Manufacturers with extensive structural trade, Birmingham area.—Apply stating age, experience and salary required to Box 250, "The Builder."

ESTIMATOR Required by permanent and well-known building and civil engineering company in Nottingham. Permanent position, with superannuation for right man.—Apply stating age, experience and salary required, Box 274, "The Builder."

ESTIMATOR/SURVEYOR Required, experienced in small works and medium-sized contracts.—Full details of experience, age, etc., to C. JENNER & SON, Ltd., 11 North-street, Ashford, Kent.

EXPERIENCED ESTIMATORS / QUANTITY SURVEYORS and ASSISTANTS Required by progressive Building and Civil Engineering Contractors operating in Southern Counties. Sound knowledge of preparation and pricing Bills of Quantities, including preparation of Bonus figures essential. Both Senior and Junior persons wishing to progress will be favourably considered. Salary will be according to capabilities and Commission will be paid on results achieved, also invitation to join Pension Scheme after trial period. Firm is anxious to attract keen and enthusiastic persons who are prepared to use their best endeavours in the interests of the Company's expanding activities, to the mutual advantage of all concerned.—Apply Box 269, "The Builder."

PLUMBING CHIEF ESTIMATOR AND BUYER

We require the services of a thoroughly experienced executive to become part of an enthusiastic team in our expanding organisation in London.

Good Salary
Superannuation
Bonus

Every consideration will be given to secure a first class man.

Apply Managing Director
BUILDING ENGINEERING CONTRACTORS LTD.
DYSART STREET, LONDON, E.C.2.

ESTIMATOR Required for works engineers' department of large Coventry Engineering Company, in connection with all types industrial building work. Some knowledge of estimating for plant and service installations would be an advantage.—Write, stating experience, age and salary expected to Ref. ES, Box 282, "The Builder."

ESTIMATOR/SURVEYOR Required by medium-size Building Contractors in Sheffield. Excellent opportunities. Own Staff informed.—Fullest details in confidence to Box 289, "The Builder."

BUILDER'S ESTIMATOR AND SURVEYOR Required by Central London Builders. Permanent job for man used to alterations and new works, and able to take off own quantities where necessary. —Please reply giving details of experience and salary required.—Box 290, "The Builder."

PLUMBING ESTIMATOR/SURVEYOR Required to assist in pricing and running small and medium-size contracts. Experience, ability and initiative suitably rewarded.—Write stating past experience, qualifications and salary to C. S. BACON & SON (LONDON), Ltd., 2 King's Bench Walk, Temple, E.C.4.

SENIOR ASSISTANT ESTIMATOR required for St. Albans office. Applicants should possess a wide experience in the preparation of tenders from Bills of Quantities and drawings for building work of every description.—Reply stating age, previous experience and salary required, to: Secretary, C. M'SSIN & SONS, Ltd., Romeland House, St. Albans.

BUILDER'S ASSISTANT ESTIMATOR SURVEYOR Required for West Herts contractors.—Please apply stating age, experience, and salary required to Box 324, "The Builder."

BUILDING MANAGER

required by progressive medium sized firm of Building and Civil Engineering Contractors operating in S.W. England. The person appointed will be directly responsible to the Managing Director and should preferably be under 45 years of age. Applicants should be capable of controlling all aspects of the department and preference will be given to persons holding a similar position with a reputable firm.

The appointment offers a first class opportunity to a keen ambitious man experienced in modern methods and capable of developing the scope of the department within an expanding organisation. Top salary will be paid dependent upon experience and proven ability.

Applications, which will be treated in strict confidence should be made in writing giving details of age, experience, present position and salary range, to **The Managing Director, Devon Contractors Ltd, Venny Bridge, Whipton, Exeter.**

MANAGER/SURVEYOR with considerable experience of Shuttering Required for specialist subcontractor in the Glasgow area. Applicants must be capable of taking complete charge of expanding organisation. Position offers good salary and excellent prospects to the right man. Car provided. Superannuation scheme.—Reply, giving full particulars of age and experience, to Box 245, "The Builder."

WORKS AND PRODUCTION MANAGER for leading firm of Architectural Metalworkers in West London area. Applicants must have experience of ferrous and non-ferrous materials and be capable of estimating, and control of labour. To take charge under Director. Salary up to £1,500 would be paid according to capabilities. Pension scheme.—Full details and experience, in confidence, to Box 259, "The Builder."

SALES MANAGER Required by progressive firm in Middlesex, manufacturing doors and high-class joinery items.—Apply giving full particulars of experience, etc., to Box 235, "The Builder."

MANAGER Required by old-established provincial Contractors for their office in London. Excellent prospects for experienced gentleman of integrity and sound personality. Must be capable of preparing estimates up to £200,000, interviewing clients and organising the job to Final Account. The position is permanent with excellent scope for advancement. Assistance could be given towards housing if necessary.—Applications with full details of age, qualifications and past experience, to Box 249, "The Builder."

Administrative position arises in large and progressive building and civil engineering company for an experienced

CONTRACTS MANAGER

in expanding subsidiary in S. W. England. This is an opportunity for someone with enthusiasm, drive and initiative to take control of large building projects. Generous remuneration, superannuation, and car provided. All applications should be addressed, in strict confidence, giving brief particulars of qualifications and experience, to:

Joint Managing Director,
C. Bryant & Son Ltd.,
65, Whitmore Road,
Birmingham 10.

MANAGER Required for Contractors Joinery Works, must be fully experienced in all aspects of the trade and able to estimate. Situation outer London.—Apply with details and approximate salary required to Box 236, "The Builder."

PERSONNEL MANAGER. A large contracting organisation Requires the services of a competent person, based at its Head Office in the North of England, to supervise all personnel and welfare matters throughout the Company. The post requires: (1) a knowledge of the Working Rules of both the Civil Engineering and Building Industries, Safety Health and Welfare Regulations, and the law relating to employment generally; (2) previous experience in a similar capacity in the contracting industry including experience in negotiating with Trade Union officials. The appointment is pensionable and carries a salary commensurate with the duties involved.—Reply fully with details of age, qualifications and experience to Box 204, "The Builder."

WORKS MANAGER/SUPERVISOR Required. Man aged between 35-45 years. Must be thoroughly experienced in both shopfitting and general building work with knowledge of joiners' shop and woodworking machinery. To control approximately 60 men. With present turnover of £100,000 per annum. Must be able to drive. Progressive position with expanding Company. Pension scheme. Salary up to £1,000 per annum according to experience.—Write full details in confidence to Managing Director, Box 205, "The Builder."

MSL

have been retained to advise on the appointment of a

GENERAL MANAGER
(Building).

for a contracting business in S.W. England, which is a branch of a medium-sized constructional engineering concern and as such has the financial backing and stability of the parent company. The branch deals with a variety of industrial and local government building and civil engineering projects up to about £200,000 contract value.

The General Manager will control all aspects of the contracting business and in addition will work closely with the Board of the parent company in negotiating for constructional concrete and steelwork in the South West. Within 12 months he will be considered for resident directorship.

Previous experience of management in a contracting business, dealing with a variety of types of building is essential. This experience must have included overall responsibility for commercial and technical matters. Both technical qualifications and financial appreciation of the building business are necessary. Preferred age 35-45. Commencing basic salary £2,000—£2,500 plus car and superannuation, and assistance with rehousing.

Please send brief details in confidence, quoting reference Y.1508, to W. F. Younger. In no circumstances will a candidate's identity be disclosed to the company concerned unless he gives permission after a confidential interview at which he will be given full details of the appointment.

MANAGEMENT SELECTION LIMITED
17, Stratton Street, London, W.1.

CONTRACTS MANAGER

Required by Building and Civil Engineering Contractors to take over management and control of building contracts in the Leeds area.

Applicants must have had previous experience in a similar position and be able and prepared to use modern building methods.

The post is particularly suitable to a man not exceeding 40 years of age who is desirous of making a permanent position for himself in a progressive, medium-sized organisation. There is a contributory pensions scheme in operation.

Applications should be made in writing giving age and salary required and clearly stating details of previous experience. All applications will be treated in confidence and should be addressed to: The Managing Director, WALTER G. BIRCH (HARROGATE), Ltd., Montpellier House, Harrogate.

CONTRACTS MANAGER Required for flat and housing estates, borders of Berkshire, Middlesex and Surrey. Permanent position. Write stating age, salary and experience.—Box 977, "The Builder."

EXPERIENCED TOP GRADE CONTRACTS MANAGER Required by old-established Buckinghamshire Builders engaged in general Contracting work up to £250,000. Successful applicant required to be responsible to Directors for all aspects of Contract Administration and Planning and must have previous experience and good references for position of a similar nature. Preference will be given to applicant under 40 years of age.—Write in first instance to Managing Director, Box 206, "The Builder."

MANAGER Required for control of contracts department of reinforced concrete engineers. London area.—Box 207, "The Builder."

CONTRACTS MANAGER Required for flats and housing estates by progressive building company north of Thames. Permanent position, pension scheme. Car owner.—Write stating age, experience, salary required, Box 208, "The Builder."

ASSISTANT TO CONTRACTS MANAGER. Young man completed National Service with H.N.C. and experienced in contract routine including taking-off and ordering materials. Permanent and progressive position for right applicant. Superannuation scheme and bonus.—Apply in writing, giving age, qualifications, experience and salary required, to M. HOWARD (MITCHAM) Ltd., Wandle House, London-road, Mitcham, Surrey.

A CONTRACT MANAGER is Required by Old-Established City Builders for jobs up to about £25,000. He should be able to see these through from first enquiry to final account. He must be capable of inspiring confidence in customers and securing new business. Salary according to experience. —Box 288, "The Builder."

COURTNEY, POPE LIMITED

require

SHOPFITTING REPRESENTATIVES

Excellent opportunities exist for ambitious experienced technical representatives in progressive and expanding organisation. Previous selling experience, particularly in departmental store business, is essential Applications with full details of experience, age and qualifications will be treated in strictest confidence and should be addressed to the Managing Director, quoting Ref. B/R

FENCING contractors Require BUYER for Taking-off and ordering materials, etc. Previous fencing experience an advantage.—Apply in writing to VARDALE FENCING CO., Ltd., 68-76 Varcoe-road, S.E.16.

SALES PROMOTION ASSISTANT Required as technical correspondent by leading manufacturer of prefabricated buildings (Home Counties). Essential characteristics are architectural or building trade background, flair for selling, sound executive sense with ability to write concise and fluent technical sales letters of a high standard.—Send full details of education, career, salary, etc., to Box 230, "The Builder."

REPRESENTATIVE Required, Yorkshire, Durham, resident in area, for sale of Plastic Roof Sheeting, etc. Experience with roofing contractors, builder merchants, etc., an advantage.—Write, giving full details to Box 146, "The Builder."

EXPERIENCED SALES REPRESENTATIVE in floorings Required for London area to contact architects and contractors. Must be capable of earning at least £2,000 per annum in commission with a guaranteed minimum, plus car and expenses.—Apply with details of experience to Box 209, "The Builder."

ASSISTANT Required Buying Department.—Apply Mr. Battershill, R. D. HOPE & CO., Ltd., Building Contractors, 13-15 Selsdon-road, South Croydon. Croydon 9262.

YOUNG man Required as ASSISTANT TO BUYER, some previous experience or knowledge of the trade essential.—Apply stating age and salary required to Secretary, WHYATT (BUILDERS), Ltd., 225 Streatham High-road, S.W.16.

WANTED, FREE-LANCE REPRESENTATIVES already calling on Builders and Contractors, to sell a good additional product in this field. Generous commission and exclusive territory offered. —Box 210, "The Builder."

REQUIRED URGENTLY by WILSON LOVATT & SONS, Ltd., Builders and Civil Engineers, 16 Grosvenor-crescent, S.W.1. MALE ASSISTANT in busy Buying Office. Must be accurate at figure work and have a knowledge of the trade.—Apply in writing or 'phone SLOane 0365 for appointment.

AN interesting SALES POSITION for young man with drive and ability who has knowledge of the building trade, particularly in regard to contacting architects. Position vacant, Birmingham/Manchester area. Own car advantageous.—Please write, giving full details of experience, to Box 258, "The Builder."

BUILDING

OUTDOOR REPRESENTATIVE

with practical (rather than selling) experience of roof construction required for N.W. London—S. London—E. London. Age 25–35. Salary £800 plus liberal commission. Car provided. Clean driving licence essential. Sound health. Only written applications with full particulars can be considered.

Industrial Engineering Ltd. (J.G.M.) Vogue House, Hanover Square, W.1.

A YOUNG man with architectural knowledge and some sales experience is Required for an OUTSIDE SALES POSITION with a company of repute. Area comprises Norfolk, Suffolk, Cambs, and South Lincs, and applicant must live in area. Salary, commission and expenses with car provided. Ability to meet prospective clients at all levels essential, and this berth holds good prospects for a man who is ready to develop into a first class representative.—Box 251, "The Builder."

ASSISTANT BUYER

An old-established B. and C.E. Contractor with Head office in West Midlands require an Assistant Buyer. Age between 25 to 35 years, educated to H.N.C. level including Maths, with at least 5 years' previous experience in the trade, building Surveyor trained and used to B. of Q., specification and contract documents with some knowledge of Sub-Contracts and material markets. Applications should state brief details and will be treated with strict confidence and should be addressed to the Commercial Manager,

Box 237

BUILDERS' CLERK (Prime Cost), must be experienced and accurate. Accommodation may be available.—Reply stating age, experience and salary required.—C. MISKIN & SONS, Ltd., Romeland House, St. Albans.

COST CLERK Required for Contractor's office, East London. Previous experience essential.—Write stating age, experience and salary required.—Box 211, "The Builder."

SHORTHAND TYPIST, experienced, West End Builders. Salary £11 per week, no Saturdays.—Write giving details to Box 212, "The Builder."

PRIME COST CLERK with some experience of increased cost claims and daywork accounts Required by Chartered Quantity Surveyors on a large Civil Engineering contract in Gloucestershire.—Reply stating age, experience and salary required, to Box 213, "The Builder."

BUILDER'S CLERK with knowledge of estimating, quantities and builders' accounts required for Chief Architects Department of large multiple retail company with offices in London. Five-day week, dining room, and pension scheme. Applicants should state age, experience and salary required.—Box 214, "The Builder."

BUILDERS' CLERK, 35-40, thoroughly experienced. Invoice checking, recoverables, assist buying dept., etc. Write age, experience, salary.—Box 253, "The Builder."

COST CLERK, capable and experienced, Required. Permanent and progressive post with pension scheme and 5-day week.—Write details experience, age and salary required.—Secretary, DIESPEKER & CO., Ltd., Clifton House, Euston-road, N.W.1.

COST AND WAGES CLERK Required for expanding firm of Building Contractors. Must be conversant with building materials.—Apply stating age, full details of experience and salary required, to Box 270, "The Builder."

SECRETARY/ASSISTANT Required for interesting work in new Sales Division of National Company (Wembley). Shorthand-typing with ability to work on own initiative essential. Previous experience with building industry an advantage. Congenial working conditions and 5-day week. Canteen facilities and luncheon vouchers.—Write Box 261, "The Builder," or telephone Wembley 6001 Ext. 11.

JUNIOR SITE CLERK Required, Kings Cross area.—Apply J. M. HILL & SONS, Ltd., Heather Park Drive, North Circular-road, Wembley.

BUILDERS ESTIMATING AND COSTING CLERK Required. Supervision an advantage, by Country Builders, West Kent area.—Box 291, "The Builder."

EXCEPTIONAL opportunity for a BUILDER'S CLERK to specialise in Plumbing and Heating accounts and estimates. Join our enthusiastic team in an expanding organisation. Good salary and conditions.—BUILDING ENGINEERING CONTRACTORS, Ltd., Dysart-street, E.C.2.

BUILDERS' CLERK to send out enquiries to Sub-Contractors and Suppliers for estimating, and assist in Cost and Order Departments.—Reply stating age, experience and salary required, C. MISKIN & SONS, Ltd., Romeland House, St. Albans.

EXPERIENCED BUILDERS' GENERAL CLERK Required for jobbing and small contracts office, S.W.6 district. Typing essential.—Apply Box 316, "The Builder."

SUBSTANTIAL firm of Building and Civil Engineering Contractors, N.W. London area, urgently Require services of keen and experienced PUBLIC RELATIONS OFFICER. Applicants must have top-level contacts with the Professions, Government Departments and Clients. Only men of proven ability need apply.—Applications in full detail stating salary, etc., required, with copy references, if any, to Box 215, "The Builder."

ASSISTANT Required in Small Works Department of Westminster Contractor. Capable of preparing estimates from drawings and/or site measurements. Training in pricing will be given. Excellent opportunity offered in growing concern, for keen man.—Write giving experience, training, age and salary required to Box 217, "The Builder."

ASSISTANT to Director Required, sound knowledge of Builders Estimating and Surveying essential, prepared to work on own initiative. State age and experience, commencing salary up to £850 per annum. Holiday commitments respected.—Box 252, "The Builder."

FORD AND WALTON, Ltd., Require an ASSISTANT in their Sub-Contracts Office.—Apply in writing stating age, experience and salary required to Personnel Manager, FORD & WALTON, Ltd., Warton-road, E.15.

YOUNG ABSTRACTOR Required by West London firm of painting contractors. Preparation increased costs, dayworks. Good salary, luncheon vouchers, superannuation.—Reply to Box 254, "The Builder."

JUNIOR ASSISTANT, aged 20-25, Required in Maintenance Department of large commercial undertaking. General building experience, good draughtsman and tracer, and capable of keeping drawing office records and information, etc. Interesting work in ideal office conditions with canteen and other facilities. Five-day week. S.W.1 area.—Apply stating education, experience and salary required to Box 293, "The Builder."

APPLICATIONS are invited for the post of WORKS ASSISTANT in the office of the Building Supervisor. Duties will include simple drawings and tracings, preparation of estimates and specifications, keeping records and returns. Salary scale £415-£625.—Applications to Group Secretary, Group 20 Hospital Management Committee, COVENTRY & WARWICKSHIRE HOSPITAL, Coventry.

AN energetic and competent man is Required, in first instance to carry out a £50,000 industrial building contract in S. Yorks. He should have requisite technical and practical knowledge to produce a good job expeditiously and economically. The appointment would be permanent and progressive for the right man. Assistance with housing if required.—Full details, salary expected and availability to Box 292, "The Builder."

PLUMBING ASSISTANT Required London office. Intermediate standard for design and detail drawings for drainage to buildings, draughtsmanship and general knowledge building trade necessary. Write details experience, age, salary.—Box 319, "The Builder."

URGENTLY wanted by reputable Building and Civil Engineering Contractors, N.W. London area, PERSONAL ASSISTANT TO MANAGING DIRECTOR. Applicants must have extensive knowledge of all trades, have adequate administrative experience and to be able to generally act in the capacity of Personal Assistant as above.—Applications in full detail, giving age, previous experience, salary required and copy references, if any, to Box 216, "The Builder."

BUILDING AGENTS

required by a National Firm of Contractors for the Midlands and South Wales Areas—capable of controlling 5 to 7 sites with values ranging from £10,000 to £300,000—such as Local Authority Housing—private enterprize—Ministry and other specialized works. Applicants must be well experienced in Site organization and pre-planning, posessing initiative and drive, to work on own account—Technical qualifications preferred, but not essential. Permanent position with superannuation scheme—Car provided—full details required of ALL previous experience in date order together with Salary required. All replies will be acknowledged and information treated in strict confidence—staff informed.

Box No. 229 "The Builder"

AGENT/GENERAL FOREMAN Required by established Building Contractors on the south coast. Excellent prospects are offered to an energetic and experienced man who will be required to work on contracts in the Brighton area.—Apply in writing to Box 244, "The Builder."

AGENT Required, building experience. London contract.—Write LAVENDER McMILLAN (CNTRS.), Ltd., 54 Cheam Common-road, Worcester Park, Surrey.

AGENT

required for half-million pound contract in West London area by national Building Contractors. Applications are invited from men with considerable experience of large building contracts, operating to tight schedules. Good salary, conditions and opportunities including participation in superannuation scheme.

Box No. 294 "The Builder."

FOREMAN for small builder's joinery works. Good opening for capable man. Watford district.—Apply Box 141, "The Builder."

SENIOR GENERAL FOREMAN Required. Large London Building Contractor. Applicants must be fully experienced and prepared to travel. Excellent salaries to suitable applicants. Pensions Scheme.—Write, stating age and full experience, to Box 143, "The Builder."

CONTRACTS SUPERVISOR Required, age not exceeding 40. Must possess first-class knowledge and experience of handling all types of Contracts from Housing Estates to Multi-storey development. A high standard of administrative ability essential.—Apply in writing, PROWTING LIMITED, 127 High-street, Ruislip, Middlesex, stating age, experience and salary required.

WORKING FOREMAN Required, Brentwood district. State age, experience and salary required.—F. M. NOBLE & SON, Ltd., Ongar, Essex.

GENERAL FOREMAN Required for flat and housing contracts, Surrey, Sussex and Hampshire areas.—Write giving full particulars of past experience.—Box 970, "The Builder."

FOREMEN Required for following New Contracts. Church, S.W.; 2 Air Ministry Contracts—1 Oxfordshire, 1 North Middlesex; Factory and Offices, Surbiton.—Send full details, experience, salary required, Box 218, "The Builder."

GENERAL FOREMAN

required by Firm of National Contractors, whose Head Office is situated in the Westminster area, for employment of high grade work.

It is essential that applicants should have a good knowledge of all types of building construction and should be able to use instruments and mechanical plant.

Write please in the first instance, giving full particulars, to :—

Box 221 "The Builder"

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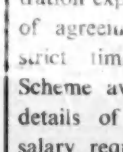

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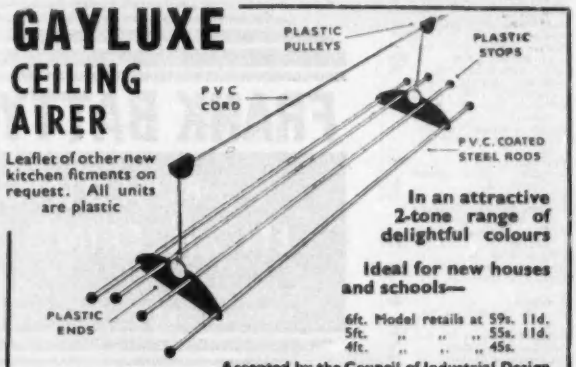

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APPLICATIONS

A. building industry

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walls and ceilings

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When a dry-finish is specified for an internal wall, plaster board can be fixed directly to Flamingo — a method that speeds construction, eliminates cavities behind the plaster board, reduces labour costs considerably and does away with the need for wooden lists. For ceilings, plaster board and Flamingo can be fixed in one easy operation.

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